Nano One Materials Corp.

Financial Statements

December 31, 2021

(Expressed in Canadian dollars)

INDEPENDENT AUDITOR'S REPORT

To the Shareholders of
Nano One Materials Corp.

Opinion

We have audited the accompanying financial statements of Nano One Materials Corp. (the "Company"), which comprise the statements of financial position as at December 31, 2021 and 2020, and the statements of loss and comprehensive loss, cash flows, and changes in shareholders' equity for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2021 and 2020, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current year. These matters were addressed in the context of our audit of the financial statements as a whole, prepared under the conditions mentioned above, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

During the year ended December 31, 2021 the Company received $1,948,731 and accrued $47,652 from the Government of Canada for its research activities through various programs. Refer to financial statements Note 6.

Due to the significance of government assistance received and possibility that amounts claimed are susceptible to potential manipulation, we consider government assistance to be a key audit matter.

Our audit procedures included, but were not limited to:

- Reviewing and gaining an understanding of the Company's policy for recognizing government assistance and internal controls related to government assistance.
- Reviewing contribution agreements and vouching grants received.
- Recalculating amortization of deferred government assistance and testing the eligibility and accuracy of the amounts applied as reductions against the Company's applicable assets and expenses.

Other Information

Management is responsible for the other information. The other information obtained at the date of this auditor's report includes Management's Discussion and Analysis.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis prior to the date of this auditor's report. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Carmen Newnham.

Davidson & Company LLP

Vancouver, Canada

Chartered Professional Accountants

March 28, 2022

Nano One Materials Corp.

Statements of Financial Position

(Expressed in Canadian Dollars)

As at December 31, 2021 and December 31, 2020

	Note	**December 31, 2021 $**	December 31, 2020 $
Assets			
Current assets			
Cash and cash equivalents		52,652,258	27,750,290
Short-term investment		-	1,009,164
Receivables and prepayments	3	697,182	403,985
		53,349,440	29,163,439
Non-current assets			
Deposits	3	158,691	287,929
Property and equipment	4	1,824,058	1,484,956
Intangible assets - patents	5	25,708	22,703
		2,008,457	1,795,588
Total assets		**55,357,897**	30,959,027
Liabilities and shareholders' equity			
Current liabilities			
Accounts payable and accrued liabilities		759,014	480,038
Accounts payable to related parties	8	25,024	49,324
Deferred government assistance	6	18,958	821,256
Lease liabilities - current portion	4	143,740	88,833
		946,736	1,439,451
Non-current liabilities			
Lease liabilities	4	656,190	621,240
Total liabilities		**1,602,926**	2,060,691
Shareholders' equity			
Share capital	7	82,607,348	50,733,826
Reserves	7	8,977,007	4,726,488
Deficit		(37,829,384)	(26,561,978)
Total shareholders' equity		**53,754,971**	28,898,336
Total liabilities and shareholders' equity		**55,357,897**	30,959,027
Nature and continuance of operations	1		
Subsequent events	14		

Approved on behalf of the Board of Directors on March 28, 2022:

"Dan Blondal"	*"Lyle Brown"*
Director	**Director**

The accompanying notes are an integral part of these financial statements.

Nano One Materials Corp.

Statements of Loss and Comprehensive Loss

(Expressed in Canadian Dollars)

For the years ended December 31, 2021 and December 31, 2020

	Note	**December 31, 2021 $**	December 31, 2020 $
Expenses			
Amortization	5	1,888	1,576
Business development fees		-	90,026
Consulting fees		510,653	456,291
Depreciation	4	125,145	83,539
Finance costs	4	74,501	27,372
General and administrative expenses		560,679	332,586
Investor relations and shareholder information		760,856	565,692
Management and directors' fees	8	354,175	429,000
Professional fees, net	6,8	335,408	218,559
Research expenses, net	6,8	2,133,219	228,644
Salaries and benefits, net	6,8	1,823,225	1,005,293
Share-based payments	7,8	4,385,894	1,651,930
Transfer agent and filing fees		297,413	152,151
Travel, meals, and conferences		28,033	58,805
Loss from operating expenses		**(11,391,089)**	(5,301,464)
Interest income		198,761	89,056
Bad debt		(130,780)	-
Loss and comprehensive loss for the year		**(11,323,108)**	(5,212,408)
Loss per share			
Weighted average number of common shares outstanding			
- basic		**93,876,156**	79,131,582
- diluted		**93,876,156**	79,131,582
Basic loss per common share		**(0.12)**	(0.07)
Diluted loss per common share		**(0.12)**	(0.07)

The accompanying notes are an integral part of these financial statements.

Nano One Materials Corp.

Statements of Cash Flows

(Expressed in Canadian Dollars)

For the years ended December 31, 2021 and December 31, 2020

	Note	**December 31, 2021 $**	December 31, 2020 $
Operating activities			
Loss for the year		(11,323,108)	(5,212,408)
Adjustments for:			
Amortization		1,888	1,576
Depreciation	4	674,712	272,841
Finance costs		74,501	27,372
Share-based payments		4,385,894	1,651,930
Interest income		(198,761)	(89,056)
Non-cash working capital items:			
Receivables and prepayments		(293,197)	(231,125)
Deposits		-	(37,205)
Accounts payable and accrued liabilities		485,426	523,557
Accounts payable to related parties		(24,300)	24,460
Deferred government assistance		(802,298)	144,883
		(7,019,243)	(2,923,175)
Investing activities			
Interest income received on cash and cash equivalents		198,761	78,952
Maturity of short-term investment		1,009,164	199,851
Purchase of short-term investment		-	(1,000,000)
Deposits on property and equipment		(115,068)	(192,809)
Security deposit on facility lease		(7,125)	-
Purchases of property and equipment, net		(763,533)	(597,827)
Payments for intangible assets	5	(4,893)	-
		317,306	(1,511,833)
Financing activities			
Issuance of common shares/units for cash		33,799,225	32,444,233
Share issue costs		(2,005,376)	(1,868,855)
Payments of lease liabilities	4	(189,944)	(137,594)
		31,603,905	30,437,784
Increase in cash and cash equivalents		**24,901,968**	26,002,776
Cash and cash equivalents, beginning of year		**27,750,290**	1,747,514
Cash and cash equivalents, end of year		**52,652,258**	27,750,290
Cash and cash equivalents comprise:			
Cash	10	816,595	23,720,964
Cash equivalents		51,835,663	4,029,326
Cash and cash equivalents, end of year		**52,652,258**	27,750,290
Supplemental cash flow information	9		

The accompanying notes are an integral part of these financial statements.

Nano One Materials Corp.

Statements of Changes in Shareholders' Equity

(Expressed in Canadian Dollars)

For the years ended December 31, 2021 and December 31, 2020

	Number of common shares	Share capital $	Reserves $	Deficit $	Total $
December 31, 2019	67,189,802	20,068,795	3,163,224	(21,363,583)	1,868,436
Issue of units - private placement	9,565,000	10,999,750	-	-	10,999,750
Issue of units - prospectus financing	5,282,900	13,999,685	369,803	-	14,369,488
Shares issued for finance fee	79,242	215,538	-	-	215,538
Share issue costs - cash	-	(1,868,855)	-	-	(1,868,855)
Share issue costs - non-cash	-	(888,838)	673,300	-	(215,538)
Stock options granted for leasehold improvement services	-	-	15,000	-	15,000
Exercise of stock options	2,724,100	1,157,725	-	-	1,157,725
Re-allocated on exercise of stock options	-	871,444	(871,444)	-	-
Re-allocated on cancellation of stock options	-	-	(14,013)	14,013	-
Exercise of warrants	3,396,494	5,917,270	-	-	5,917,270
Re-allocated on exercise of warrants	-	261,312	(261,312)	-	-
Share-based payments	-	-	1,651,930	-	1,651,930
Loss and comprehensive loss for the year	-	-	-	(5,212,408)	(5,212,408)
December 31, 2020	88,237,538	50,733,826	4,726,488	(26,561,978)	28,898,336
December 31, 2020	88,237,538	50,733,826	4,726,488	(26,561,978)	28,898,336
Issue of common shares - prospectus financing	5,405,000	28,916,750	-	-	28,916,750
Share issue costs - cash	-	(2,005,376)	-	-	(2,005,376)
Share issue costs - non-cash	-	(641,100)	641,100	-	-
Exercise of stock options	369,125	436,995	-	-	436,995
Re-allocated on exercise of stock options	-	239,824	(239,824)	-	-
Re-allocated on cancellation of stock options	-	-	(55,702)	55,702	-
Exercise of warrants	1,516,440	4,445,480	-	-	4,445,480
Re-allocated on exercise of warrants	-	480,949	(480,949)	-	-
Share-based payments	-	-	4,385,894	-	4,385,894
Loss and comprehensive loss for the year	-	-	-	(11,323,108)	(11,323,108)
December 31, 2021	**95,528,103**	**82,607,348**	**8,977,007**	**(37,829,384)**	**53,754,971**

The accompanying notes are an integral part of these financial statements.

1. NATURE AND CONTINUANCE OF OPERATIONS

Nano One Materials Corp. (the "Company") was incorporated under the laws of the Province of Alberta on November 5, 1987 and continued under the laws of the Province of British Columbia. The Company's head office is located at Unit 101B, 8575 Government Street, Burnaby, BC, V3N 4V1, Canada. Its records office is located at Suite 2900 – 550 Burrard Street, Vancouver, BC, V6C 0A3, Canada. Effective June 8, 2021, the Company's common shares commenced trading on the Toronto Stock Exchange (the "TSX") under the symbol "NANO". The Company's common shares formerly traded on the TSX Venture Exchange under the symbol "NNO".

The Company has developed, patented and scaled-up an innovative "One-Pot Process" for the production of cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics. The Company has built a demonstration pilot plant (Note 4) and is establishing partnerships throughout the lithium-ion battery supply chain to improve the cost and durability of lithium-ion batteries and progress towards commercialization. As of the approval date of these financial statements, the Company holds twenty (21) patents (December 31, 2020 – sixteen (16) (Note 5), with several others pending.

These financial statements have been prepared on the basis that the Company will continue as a going concern, which assumes that the Company will be able to continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations. The Company has not yet commenced revenue generating activities by way of licensing, commercialization, or other and has historically incurred operating losses. As at December 31, 2021, the Company had working capital of $52,402,704 (December 31, 2020 - $27,723,988), which management assesses is sufficient for the Company to continue as a going concern beyond one year. The Company will utilize this working capital to execute on its research and strategic objectives and carry on as a going concern. The Company's ability to continue as a going concern on a long-term basis is primarily dependent upon continued government assistance programs, financial support and/or contributions from its industry partners, the ability to raise additional capital from equity markets, and the ability to generate future profitable operations.

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or results of operations or on the Company's industry partners who provide in-kind and/or financial contributions to the Company's government programs (Note 6). There are travel restrictions and health and safety concerns that may delay the Company's research activities. Operations depend on safeguarding all personnel during the outbreak, which may be prohibitive in certain aspects.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB") and interpretations of the International Financial Reporting Interpretations Committee ("IFRIC").

These financial statements have been prepared on a historical cost basis, except for financial instruments measured at fair value. In addition, these financial statements have been prepared using the accrual basis of accounting, except for cash flow information.

Functional and presentation currency

All amounts on these financial statements are presented in Canadian dollars which is the functional currency of the Company.

Principles of consolidation

Subsidiaries are entities controlled by the Company and are included in the financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries are changed where necessary to align them with the policies adopted by the Company. Inter-company balances and transactions, and any unrealized income (loss) and expenses arising from inter-company transactions, are eliminated in preparing the financial statements.

Subsequent to December 31, 2021, on February 22, 2022, the Company incorporated a wholly-owned subsidiary, Nano One Materials Québec Inc. ("Nano Quebec"), in Quebec, Canada.

Significant accounting estimates and judgments

The preparation of financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as at the date of the financial statements and reported amounts of income (loss) and expenses during each reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates.

The information about significant areas of estimation uncertainty considered by management in preparing these financial statements is as follows:

Fair value of equity incentives (stock options, restricted share units, deferred share units, performance share units) and compensatory warrants

Determining the fair value of compensatory warrants (finders' warrants) and stock options requires estimates related to the choice of a pricing model, the estimation of stock price volatility, the fair value of the Company's common shares, the expected forfeiture rate and the expected term of the underlying instruments. Any changes in the estimates or inputs utilized to determine fair value could have a significant impact on the Company's future operating results or on other components of shareholders' equity.

Determining fair value of other equity incentives granted requires management's assessment of the market price of the Company's common shares on the date immediately preceding the date of grant.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Significant accounting estimates and judgments (continued)

Property and equipment

The estimated useful lives of property and equipment are reviewed by management and adjusted if necessary. To estimate property and equipment's useful life, management may use its past experience, review engineering estimates and industry practices for similar items of property and equipment and/or apply statistical methods to assist in its determination of useful life.

The estimated useful life of the Company's pilot plant within property and equipment is subject to specific estimation uncertainty as to the duration of use. The use of the pilot plant has historically been driven by securing government assistance to conduct research activities that utilize the pilot plant. Accordingly, the Company has historically depreciated the pilot plant over the term of the government assistance program. Future determinations of the expected life of the pilot plant may differ from historical experience.

The information about significant areas of judgment considered by management in preparing these financial statements is as follows:

Income taxes

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods. Deferred tax assets (if any) are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse and a judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amounts recognized in profit or loss in the period in which the change occurs.

Research expenses

The determination of whether expenditures on research and development activities meet the criteria for capitalization as internally generated intangible assets is subject to estimation and uncertainty.

Government assistance

Government assistance ("grants") are recognized where there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as a deduction against the related expense over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Where the grant relates to an asset, it reduces the carrying amount of the asset. Government grants received in advance that relate to expenses to be incurred in future periods are deferred on the statements of financial position as deferred government assistance and deducted against the related expenditures as incurred.

For the years ended December 31, 2021 and December 31, 2020, government grants received by the Company have been applied as reductions, as applicable, against property and equipment on the statements of financial position, and to professional fees, research expenses, and salaries and benefits on the statements of loss and comprehensive loss.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Research and development

Expenditures on research and development activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss (research expenses, net) as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. Upon a determination that the criteria to capitalize development expenditures have been met, the expenditures capitalized will include the cost of materials, direct labour, and overhead costs that are directly attributable to preparing the asset for its intended use. Other development expenditures will be expensed as incurred. Capitalized development expenditures will be measured at cost less accumulated amortization and impairment losses.

For the years presented, expenditures on research are presented net of government assistance received, and net of other cost recoveries. Additionally, no development costs have been capitalized to date.

Share capital

Common shares are classified as shareholders' equity. Transaction costs directly attributable to the issue of common shares are recognized as a deduction from shareholders' equity, as share issue costs. Common shares issued for consideration other than cash, are valued based on their fair value on the date the shares are issued.

The Company has adopted a residual value method with respect to the measurement of warrants attached to units in private placement and prospectus offerings (collectively, "equity offerings"). The residual value method first allocates value to the more easily measurable component based on fair value and then the residual value, if any, to the less easily measurable component. The Company considers the fair value of common shares issued in equity offerings to be the more easily measurable component. The balance, if any, is allocated to the attached warrants. Any value attributed to the warrants is recorded within reserves.

Share-based payments

The Company has an Omnibus Equity Incentive Plan that provides for the granting of stock options, restricted share units, deferred share units, and performance share units to directors, officers, employees and consultants to acquire common shares of the Company as part of long-term incentive compensation.

Stock options

The fair value of the stock options are measured on grant date and is recognized as an expense with a corresponding increase in reserves as the stock options vest. Stock options granted to employees and others providing similar services are measured at grant date at the fair value of the instruments issued. Fair value is determined using the Black-Scholes option pricing model considering the terms and conditions upon which the stock options were granted. The amount recognized as an expense is adjusted to reflect the actual number of stock options that are expected to vest. Each tranche in an award with graded vesting is considered a separate grant with a different vesting date and fair value. Each grant is accounted for on that basis.

Stock options granted to non-employees are measured at the fair value of the goods or services received, unless that fair value cannot be estimated reliably, in which case the fair value of the equity instruments issued is used. The value of the goods or services is recorded at the earlier of the vesting date, or the date the goods or services are received.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Share-based payments (continued)

Over the vesting period, share-based payments are recorded as an expense and as reserves. When stock options are exercised, the consideration received is recorded as share capital and the related share-based payments originally recorded as reserves are transferred to share capital. When stock options are cancelled or expire, the initial recorded value is reversed from reserves and credited to deficit (or credited to share-based payments expense to the extent that the underlying expense was recognized in the year of cancellation).

Restricted share units

Restricted share units ("RSUs") are granted to eligible directors, employees and consultants of the Company. RSUs are classified as equity settled share-based payment transactions as the participations will receive either common shares of the Company or payment of cash, or any combination of the foregoing, as determined by the Company in its sole discretion, following a redemption event. As such, the Company measures the share-based payment expense based on the quoted market price of the Company's common shares at the grant date and recognizes the expense over the vesting period, with a corresponding increase in shareholders' equity.

Deferred share units

Deferred share units ("DSUs") are granted to directors of the Company. DSUs are classified as equity settled share-based payment transactions as the participations will receive either common shares of the Company or payment of cash, or any combination of the foregoing, as determined by the Company in its sole discretion, following a redemption event. As such, the Company measures the share-based payment expense based on the quoted market price of the Company's common shares at the grant date and recognizes the expense over the vesting period, with a corresponding increase in shareholders' equity.

Property and equipment

Property and equipment is measured at cost less accumulated depreciation and impairment losses. The cost of an item of property and equipment consists of the purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use, and if applicable, an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Depreciation is recognized over the following terms, intended to depreciate the cost of property and equipment, less its residual values, if any, over its estimated useful lives:

Research and development equipment	20%
Pilot plant	Over the term of related government assistance programs
Right-of-use assets	Over the terms of the leases
Computer equipment and software:	
• Computer equipment and fixtures	30%
• Office equipment	20%
• Computer software	50%
Leasehold improvements	Over the terms of the leases

Cost includes expenditures that are directly attributable to the acquisition of the asset. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost can be measured reliably. Repairs and maintenance costs are charged to profit or loss during the period they are incurred. Any gain or loss on the disposal or retirement of property and equipment is recognized in profit or loss.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Intangible assets

Intangible assets with finite lives are measured at cost less accumulated amortization and impairment losses. These intangible assets are amortized on a straight-line basis over their estimated useful lives. Useful lives, residual values, and amortization methods for intangible assets with finite useful lives are reviewed at least annually.

Indefinite life intangible assets are measured at cost less any impairment charges. These intangible assets are tested for impairment on an annual basis or more frequently if there are indicators that intangible assets may be impaired.

The Company amortizes its finite life intangible assets over their estimated useful lives which are estimated to be the term of the underlying patents. The Company does not hold any indefinite life intangible assets as at the dates presented in these financial statements.

Impairment of non-financial assets

The Company's non-financial assets are reviewed for an indication of impairment at the end of each reporting period. If an indication of impairment exists, the asset's recoverable amount is estimated. The recoverable amount is the higher of fair value less costs to sell and value in use. Fair value is determined as the amount that would be obtained from the sale of the asset in an arm's length transaction between knowledgeable and willing parties. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount and the impairment loss is recognized in profit or loss for the period. For an asset that does not generate largely independent cash flows, the recoverable amount is determined for the cash generating unit to which the asset belongs.

An impairment loss is reversed if there is an indication that there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized. A reversal of an impairment loss is recognized immediately in profit or loss.

Leases

The Company leases office space and laboratory facilities which are included within property and equipment. Under IFRS 16, the Company assesses whether a contract to lease facilities is, or contains, a lease. For contracts that are, or contain leases, the Company recognizes a right-of-use asset (within property and equipment) and a lease liability at the commencement date of the contract.

Pursuant to the IFRS 16 lessee accounting model, right-of-use assets are initially measured at cost, which includes the initial amount of the liabilities adjusted for any lease payments made at or before the commencement date of the contract, plus any initial direct costs incurred and estimates of costs to remove or dismantle the underlying asset or to restore the underlying asset or site on which the asset is located, less any lease incentives received. The right-of-use asset is subsequently depreciated using the straight-line method over the term of the lease. The lease liability is initially measured at the present value of the lease payments that are not paid as of the commencement date of the contract, discounted using the rate implicit in the lease or, if the implicit rate cannot be readily determined, the Company's incremental borrowing rate.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Leases (continued)

The measurement of lease liabilities includes the following types of lease payments:

- Fixed payments, including in-substance fixed payments;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate as of the commencement date;
- Amounts expected to be payable under any residual value guarantees; and
- Exercise price for options that the Company is reasonably certain to exercise for an extension or option to buy, and penalties for early termination of a lease unless the Company is reasonably certain that it will not terminate the lease early. The lease liability is measured at amortized cost using the effective interest method.

Lease liabilities are remeasured in the following circumstances:

- If there is a change in the future lease payments resulting from a change in index or rate;
- If there is a change in the Company's estimation of the amount expected to be payable under a residual value guarantee; and
- If the Company changes its assessment of whether it will exercise an option to purchase, extend or terminate the lease contract.

Financial instruments

All financial instruments are recognized initially at fair value on the date at which the Company becomes a party to the contractual provisions of the instrument. The classification of the Company's financial assets and financial liabilities are detailed in Note 11.

Classification and measurement of financial assets and liabilities

The Company classifies its financial instruments based on the purpose for which they were acquired, in one of the following categories: amortized cost; fair value through other comprehensive income (loss) ("FVOCI") or fair value through profit or loss ("FVTPL"). The classification of financial assets is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

Financial liabilities are classified as those to be measured at amortized cost unless they are designated as those to be measured at FVTPL (an irrevocable election at the time of recognition). Such financial liabilities are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, financial liabilities are measured at amortized cost using the effective interest method. Interest expense (finance costs) is recorded to profit or loss.

For assets and liabilities measured at fair value, gains and losses are either recorded in profit or loss or other comprehensive income (loss). The Company reclassifies financial assets when and only when its business model for managing those assets changes. Financial liabilities are not reclassified.

Impairment of financial assets

An 'expected credit loss' ("ECL") model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investments in equity instruments. The Company's financial assets measured at amortized cost and subject to the ECL model are shown in Note 11. The Company has no history of default on receivables.

2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Foreign currency translation

Transactions in currencies other than the Canadian dollar are recorded at exchange rates prevailing on the dates of the transactions. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated at the period end exchange rate while non-monetary assets and liabilities are translated at historical rates. Expenses are translated at the exchange rates approximating those in effect on the date of the transactions. Exchange gains and losses arising on translation are included in profit or loss.

Cash and cash equivalents and short-term investments

Cash is comprised of cash on hand and demand deposits. Cash equivalents are high-interest savings accounts (see details on the management of capital in Note 10), and short-term, fixed interest rate bearing, highly-liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in values.

Short-term investments are non-redeemable, fixed interest rate bearing investments with original maturities of twelve months or less. Short-term investments are not readily converted into cash and are held for investment purposes to maturity.

Income taxes

Income tax is recognized in profit or loss except to the extent that it relates to items recognized directly in shareholders' equity, in which case it is recognized in shareholders' equity. Current tax expense is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at year end, adjusted for amendments to tax payable with regards to previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting year, applicable to the year of expected realization or settlement. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Earnings (loss) per share

The Company presents basic and diluted earnings (loss) per share ("EPS") data for its common shares. Basic EPS is calculated by dividing the profit or loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted EPS is determined by dividing the profit or loss attributable to common shareholders by the weighted average number of common shares outstanding, adjusted for the effects of all potential dilutive common shares related to outstanding stock options and warrants issued by the Company for the years presented, except if their inclusion proves to be anti-dilutive.

Standards issued but not yet effective

Certain pronouncements have been issued by the IASB or IFRIC that are effective for accounting periods beginning on or after January 1, 2022. The Company has reviewed these updates and determined that none are applicable or consequential to the Company and have been excluded from discussion within these significant accounting policies. Additionally, there were no new standards adopted by the Company during the year ended December 31, 2021.

(Expressed in Canadian Dollars)

3. RECEIVABLES, PREPAYMENTS, AND DEPOSITS

Receivables consist of the following:

	December 31, 2021 $	December 31, 2020 $
Accrued government assistance (Note 6)	47,652	4,986
Interest receivable	231	235
Prepaid expenses	285,697	41,950
Research cost recoveries	308,267	-
Sales tax recoverable	55,335	90,564
Subscriptions receivable	-	266,250
	697,182	403,985

As at December 31, 2020, subscriptions receivable represented amounts received and held by the Company's transfer agent for common shares issued on the exercise of warrants that occurred before December 31, 2020. The amounts were collected in full during the year ended December 31, 2021.

Research cost recoveries and receivables

In December 2020, the Company entered into a Cathode Evaluation Agreement with an American-based multinational auto manufacturer ("USCo") to jointly evaluate the performance and commercial benefit of the Company's patented process for nickel-rich and cobalt-free cathode materials in lithium-ion batteries for electric vehicle applications. During the year ended December 31, 2021, the Company recognized cost recoveries of $387,647 (2020 - $nil) in connection with this arrangement, of which $308,267 was receivable as at December 31, 2021. The parties are continuing work under this arrangement.

In May 2021, the Company entered into a Co-Development Agreement with CBMM Technology Suisse SA ("CBMM"), a niobium producer to co-develop niobium coated battery cathode materials with CBMM. During the year ended December 31, 2021, the Company recognized and received cost recoveries of $226,800 in connection with this arrangement. The parties are continuing work under this arrangement.

In May 2020, the Company concluded a work program with a Global OEM (Original Equipment Manufacturer) (the "OEM Partner") to jointly evaluate processes and innovative cathode materials for high energy density lithium-ion batteries in automotive applications. Over the course of the work program, the Company recovered total costs of $541,896.

During the years ended December 31, 2021 and December 31, 2020, the Company accrued or received the following research cost recoveries within research expenses, net:

	December 31, 2021 $	December 31, 2020 $
USCo	387,647	-
CBMM	226,800	-
OEM Partner	-	185,552
Other recoveries received	-	56,679
	614,447	242,231

Deposits consist of the following:

	December 31, 2021 $	December 31, 2020 $
Deposits on property and equipment	93,000	229,364
Security and other deposits	65,691	58,565
	158,691	287,929

(Expressed in Canadian Dollars)

4. PROPERTY AND EQUIPMENT

		Research and development equipment $	Pilot plant $	Right-of-use assets $	Computer equipment and software $	Leasehold improvements $	Total $
	Cost						
	December 31, 2019	883,320	1,958,664	285,552	148,644	-	3,276,180
(1)	Additions, net	240,379	91,266	566,900	14,647	76,617	989,809
	December 31, 2020	1,123,699	2,049,930	852,452	163,291	76,617	4,265,989
	Accumulated depreciation						
	December 31, 2019	523,787	1,828,014	76,133	80,258	-	2,508,192
	Depreciation	86,082	36,214	120,177	25,751	4,617	272,841
	December 31, 2020	609,869	1,864,228	196,310	106,009	4,617	2,781,033
	Cost						
	December 31, 2020	1,123,699	2,049,930	852,452	163,291	76,617	4,265,989
(1)	Additions, net	444,892	116,974	205,300	74,393	172,255	1,013,814
	December 31, 2021	**1,568,591**	**2,166,904**	**1,057,752**	**237,684**	**248,872**	**5,279,803**
	Accumulated depreciation						
	December 31, 2020	609,869	1,864,228	196,310	106,009	4,617	2,781,033
(2)	Depreciation	295,516	114,516	166,964	38,839	58,877	674,712
	December 31, 2021	**905,385**	**1,978,744**	**363,274**	**144,848**	**63,494**	**3,455,745**
	Net book value						
	December 31, 2020	513,830	185,702	656,142	57,282	72,000	1,484,956
	December 31, 2021	**663,206**	**188,160**	**694,478**	**92,836**	**185,378**	**1,824,058**

(1) Additions, net for the years ended December 31, 2021 and December 31, 2020 were reduced by the amortization of deferred government assistance as follows (Note 6):

Year ended December 31, 2021	**Research and development equipment $**	**Pilot plant $**	**Right-of-use assets $**	**Computer equipment and software $**	**Leasehold improvements $**	**Total $**
Deferred government assistance amortized	**297,045**	**49,375**	**-**	**42,792**	**149,751**	**538,963**

Year ended December 31, 2020	Research and development equipment $	Pilot plant $	Right-of-use assets $	Computer equipment and software $	Leasehold improvements $	Total $
Deferred government assistance amortized	689,715	252,969	-	32,752	227,168	1,202,604

(2) Depreciation for the years ended December 31, 2021 and December 31, 2020 is allocated as follows:

	Depreciation expense $	Research expenses, net $	Total $
December 31, 2020			
Research and development equipment	-	86,082	86,082
Pilot plant	-	36,214	36,214
Right-of-use assets	57,788	62,389	120,177
Corporate equipment and software	25,751	-	25,751
Leasehold improvements	-	4,617	4,617
	83,539	189,302	272,841
December 31, 2021			
Research and development equipment	-	295,516	295,516
Pilot plant	-	114,516	114,516
Right-of-use assets	83,102	83,862	166,964
Corporate equipment and software	38,839	-	38,839
Leasehold improvements	3,204	55,673	58,877
	125,145	**549,567**	**674,712**

(Expressed in Canadian Dollars)

4. PROPERTY AND EQUIPMENT (continued)

Right-of-use assets and Lease liabilities

The Company has agreements to lease office space, and laboratory facilities. The Company has determined that its lease contracts are leases as defined under IFRS 16 – *Leases* ("IFRS 16"). In analyzing the identified contracts, the Company applied the lessee accounting model pursuant to IFRS 16 and considered all of the facts and circumstances surrounding the inception of the contract (but not future events that are not likely to occur). Lease liabilities were calculated with a discount rate of 9%.

The Company has identified the following leases:

Location	**Asset**	**Type**	**Term of lease at December 31, 2021 including extensions**
Burnaby, BC	Building	Corporate head office (main)	0.7 Years
Burnaby, BC	Building	Corporate head office (expansion)	2.5 Years
Burnaby, BC	Building	Laboratory and pilot plant	6.7 Years
Burnaby, BC	Building	Laboratory	6.7 Years

A reconciliation of the carrying amount of the lease liabilities as at December 31, 2021 and December 31, 2020 and changes during the years then ended is as follows:

Lease liabilities	**December 31, 2021 $**	December 31, 2020 $
Beginning of year	710,073	253,395
Additions	-	205,400
Lease extension	205,300	361,500
Lease payments	(189,944)	(137,594)
Lease interest (finance costs)	74,501	27,372
End of year	**799,930**	710,073
Current portion of lease liabilities	**143,740**	88,833
Non-current portion of lease liabilities	**656,190**	621,240
Maturity analysis - contractual undiscounted cash flows		
Less than one year	207,724	150,011
One to five years	588,536	476,866
More than five years	194,328	310,925
Total undiscounted lease liabilities	**990,588**	937,802

Short-term leases are leases with a lease term of twelve months or less. As at December 31, 2021, and December 31, 2020, the Company did not have any short-term leases. As at December 31, 2021, the Company included the available extension options on its leases within the measurement of the lease liabilities, and there were no leases with residual value guarantees.

(Expressed in Canadian Dollars)

5. INTANGIBLE ASSETS

As at December 31, 2021, intangible assets include twenty (20) (December 31, 2020 - sixteen (16)) issued patents associated with the Company's technology. These patents were issued by various jurisdictions including Canada, China, Japan, Korea, Taiwan, and the United States. The patents have expiries ranging between thirteen (13) to nineteen (19) years from the patent issuance date.

The amount capitalized as intangible assets represents only the patent issue costs. Application, renewal, and other costs are expensed to professional fees as incurred. The Company has several outstanding patent applications in which all associated costs have been expensed.

	Issued patents $
Cost	
December 31, 2019 and December 31, 2020	25,514
Accumulated amortization	
December 31, 2019	1,235
Amortization	1,576
December 31, 2020	2,811
Cost	
December 31, 2020	25,514
Additions	4,893
December 31, 2021	**30,407**
Accumulated amortization	
December 31, 2020	2,811
Amortization	1,888
December 31, 2021	**4,699**
Net book value	
December 31, 2020	22,703
December 31, 2021	**25,708**

(Expressed in Canadian Dollars)

6. GOVERNMENT ASSISTANCE

The Company receives funding from the Government of Canada for its research activities through various programs. During the years ended December 31, 2021 and December 31, 2020 the following amounts were received or accrued:

		December 31, 2021	December 31, 2020
	Grant cash proceeds received:	**$**	$
(1)	Sustainable Development Technology Canada (SDTC)	1,915,359	3,055,202
(2)	Innovation Assistance Program (IAP)	-	241,225
(2)	Automotive Supplier's Innovation Program (ASIP)	-	217,446
(2)	Industrial Research Assistance Program (NRC-IRAP)	33,372	182,285
(2)	Other Grants	-	2,700
		1,948,731	3,698,858
	Grant cash proceeds accrued:		
(2)	Industrial Research Assistance Program (NRC-IRAP) (Note 3)	**47,652**	-

(1) See deferred government assistance below for allocation of SDTC for the years ended December 31, 2021 and December 31, 2020.
(2) Proceeds and accruals are recorded within research expenses, net.

Deferred government assistance:

As at December 31, 2021 and December 31, 2020, the deferred government assistance balances were in relation to SDTC Program #2 (below). Under the SDTC Program, the government assistance is received by the Company in advance of each project phase (“Milestone”) to be completed. The Company records the receipt of SDTC grant instalments initially as a liability and amortizes the liability based on the percentage of required expenditures incurred for each Milestone.

A reconciliation of the carrying amount of the deferred government assistance as at December 31, 2021 and December 31, 2020, and changes during the years then ended are as follows:

		December 31, 2021	December 31, 2020
	Deferred government assistance (SDTC Program #2)	**$**	$
	Beginning of year	821,256	676,373
	Additions - receipt of SDTC grant proceeds	1,652,859	2,805,202
(1)	Amortization	(2,455,157)	(2,660,319)
	End of year	**18,958**	821,256

(1) Amortization of deferred government assistance is allocated as follows:

	December 31, 2021	December 31, 2020
	$	$
Property and equipment (Note 4)	538,963	1,202,604
Professional fees, net	159,889	174,470
Salaries and benefits, net	295,870	151,461
Research expenses, net	1,460,435	1,131,784
	2,455,157	2,660,319

Effective May 31, 2021, the Company completed Milestone 2. As at December 31, 2021, the Company has received the Milestone 3 funds totalling $1,652,859 representing the aggregate of SDTC and British Columbia Innovative Clean Energy, Mines and Petroleum Resources (“BC-ICE”) contributions.

6. GOVERNMENT ASSISTANCE (continued)

Sustainable Development Technology Canada ("SDTC"):

SDTC Program #2 (active):

In 2019, the Company executed a contribution agreement with SDTC for a non-repayable grant in respect of the Company's "Scaling Advanced Battery Materials" project. The SDTC Program #2 grant is for up to $8,545,500 ($5,944,376 received as at December 31, 2021) which includes BC-ICE contributions (discussed below). SDTC Program #2 is estimated to conclude in June 2024.

Initially, the non-repayable grant was for up to $5,000,000 and was increased to $5,512,500 upon receiving two additional one-time non-repayable grants of $250,000 and $262,500 from SDTC in relation to COVID-19 pandemic relief during the years ended December 31, 2020 and December 31, 2021, respectively. In May 2020, the BC-ICE fund confirmed it would contribute $3,033,000 to the SDTC Program #2 (which is included in the $8,545,500 discussed above). The funds are non-repayable, and the Company will receive the funds in alignment with the SDTC grant.

The funds from SDTC Program #2 are payable to the Company in five (5) instalments including the release of a final 10% hold-back to the Company upon satisfactory review and approval of the project by SDTC. The instalments from SDTC are to be paid to the Company at the beginning of each of the four (4) Milestones. Each instalment payment is subject to the Company meeting the specific project Milestones and having available cash resources to match each instalment from SDTC.

During the year ended December 31, 2021, the Company received a total of $1,915,359 (2020 - $3,055,202) which includes $262,500 in relation to a COVID-19 pandemic relief payment, and $1,652,859 for Milestone 3 funding from SDTC and BC-ICE, in aggregate (2020 - $2,805,202 of which $2,214,490 and $590,712 related to Milestone 2 and Milestone 1 catch-up payments by BC-ICE, respectively).

National Research Council of Canada's Industrial Research Assistance Program ("NRC-IRAP"):

In aggregate, the Company received net proceeds form NRC-IRAP of $33,372 (2020 - $182,285) and accrued $47,652 within receivables (subsequently received) during the year ended December 31, 2021 as detailed below.

NRC-IRAP Program #5 (completed):

In 2018, the Company executed an agreement with NRC-IRAP for non-repayable contributions to the Company totalling $325,255 over the course of the program, for the development of coatings for high durability lithium-ion battery cathodes. Under the terms of the agreement, NRC-IRAP reimbursed the Company for 80% of salaries paid to employees involved in this project. The NRC-IRAP Program #5 concluded in October 2020.

During the year ended December 31, 2021, the Company repaid $3,408 to NRC-IRAP for an overclaim that occurred during the year ended December 31, 2020. Additionally, the Company reversed $4,986 from government assistance income (within research expenses, net due to an over accrual during the year ended December 31, 2020. During the year ended December 31, 2020, the Company received $182,285 in connection with this grant.

Youth Internship Contribution Agreement (completed subsequently)

In May 2021, the Company entered into two Youth Internship Contribution Agreements with NRC-IRAP for up to an aggregate maximum reimbursement of $72,000 in Company salaries through to January 31, 2022.

During the year ended December 31, 2021, the Company received $36,780 (2020 - $nil) from NRC-IRAP, and accrued $16,335 (2020 - $nil) within receivables (subsequently received).

(Expressed in Canadian Dollars)

6. GOVERNMENT ASSISTANCE (continued)

NRC-IRAP Program #6 (active):

In December 2021, the Company executed an agreement with NRC-IRAP for non-repayable contributions to the Company totaling up to $404,000 over the course of the program through to June 2023. The scope of the program is research into cost optimization of the Company's patented process for the manufacture of cathode active materials and specifically the use of metal feedstocks and thermal processing methods. Under the terms of the agreement, NRC-IRAP will reimburse the Company for 80% of salaries paid to employees involved in this project.

During the year ended December 31, 2021, the Company accrued $31,317 (2020 - $nil) within receivables (subsequently received) from NRC-IRAP in connection with this grant.

Innovation Assistance Program ("IAP") from NRC-IRAP:

Effective April 1, 2020, the Company executed an agreement with IAP which provided the Company with non-repayable contributions totalling $241,225 as COVID-19 pandemic relief payments relating to the Company's development of coatings for high durability lithium-ion battery cathodes. Under the terms of the agreement, IAP reimbursed the Company for 100% of salaries paid to Company employees involved in this project through to June 24, 2020.

During the year ended December 31, 2020, $241,225 was received representing a one-time occurrence in relation to COVID-19 pandemic relief, no further amounts are due from this program.

Automotive Supplier's Innovation Program – a program of Innovation, Science and Economic Development Canada (ISED) ("ASIP") (completed):

In 2016, the Company executed an agreement with ASIP which provided the Company with non-repayable contributions totalling $1,950,952 in relation to the preparation, design, construction, optimization, and operation of its pilot plant. The ASIP program concluded in June 2020.

During the year ended December 31, 2020, the Company received the final payment of $217,446 in connection with this grant.

Other Grants:

During the year ended December 31, 2021, no amounts were received for training and employment grants (2020 - $2,700).

The cumulative amounts of grant funding received since January 1, 2014 from the Government of Canada are as follows:

	December 31, 2021 **$**	December 31, 2020 $
Sustainable Development Technology Canada (SDTC)	8,025,672	6,110,313
Automotive Supplier's Innovation Program (ASIP)	1,950,952	1,950,952
Industrial Research Assistance Program (NRC-IRAP)	828,338	794,966
Innovation Assistance Program (IAP) (from NRC-IRAP)	241,225	241,225
Scientific Research & Experimental Development (SR&ED)	98,661	98,661
Other Grants	80,059	80,059
	11,224,907	9,276,176

7. SHARE CAPITAL AND RESERVES

The authorized share capital of the Company consists of unlimited common shares without par value. All issued common shares are fully paid.

Share capital

Transactions for the issuance of share capital during the year ended December 31, 2021:

a) On April 1, 2021, the Company completed a short-form prospectus financing consisting of the issuance of 5,405,000 common shares at a price of $5.35 per share for gross proceeds of $28,916,750.

An underwriters' cash commission totalling $1,735,005 was paid upon closing of the offering, plus legal, filing and other fees of $270,371. Additionally, the Company issued 324,999 finders' (underwriters') warrants exercisable at $5.35 until April 1, 2022 having a fair value on issuance of $641,100. These share issue costs were recorded as a reduction of share capital.

b) Upon the exercise of stock options, 369,125 common shares were issued at prices between $0.38 and $2.81 per share, for proceeds of $436,995. In addition, $239,824 representing the fair value of the stock options granted and vested was re-allocated from reserves to share capital.

c) Upon the exercise of warrants, 1,516,440 common shares were issued at prices between $1.60 and $3.55 per share, for proceeds of $4,445,480. In addition, $480,949 representing the fair value of certain of the warrants on initial issuance was re-allocated from reserves to share capital.

Transactions for the issuance of share capital during the year ended December 31, 2020:

d) On February 21, 2020, the Company completed a non-brokered private placement consisting of the issuance of 9,565,000 units at a price of $1.15 per unit for gross proceeds of $10,999,750 ($10,381,392 net proceeds after deducting cash finders' fees and expenses). Each unit consisted of one common share and one-half of a common share purchase warrant with each whole warrant exercisable into one common share at an exercise price of $1.60 until February 21, 2023. The residual value of the warrants attached to the units was determined to be $nil.

Cash finders' fees totalling $557,221 and legal fees of $61,137, were incurred in respect of the placement. Additionally, the Company issued 467,740 finders' warrants exercisable at $1.60 until February 21, 2023, having a fair value of $281,300. The Company recorded the fair value of the warrants issued using the Black-Scholes option pricing model. These share issue costs were recorded as a reduction of share capital.

e) Upon the exercise of stock options, 2,724,100 common shares were issued at prices between $0.25 and $2.52 per share, for proceeds of $1,157,725. In addition, $871,444 representing the fair value of the stock options granted and vested was re-allocated from reserves to share capital.

f) Upon the exercise of warrants, 3,396,494 common shares were issued at prices between $1.60 and $3.55 per share, for proceeds of $5,917,270. In addition, $261,312 representing the fair value of certain of the warrants on initial issuance was re-allocated from reserves to share capital.

g) On October 29, 2020, the Company completed a short-form prospectus financing consisting of the issue of 5,282,900 units at a price of $2.72 per unit for gross proceeds of $14,369,488 ($13,118,991 net proceeds after deducting cash finders' fees and expenses). Each unit consisted of one common share and one-half of a common share purchase warrant with each whole warrant exercisable into one common share at an exercise price of $3.55 until October 29, 2022. The residual value of the warrants attached to the units was determined to be $369,803.

Cash finders' and corporate finance fees totalling $938,018 were paid to the agents upon closing of the offering. Additionally, legal, transfer agent and filing and other fees of $312,479, were incurred in respect of the offering. Additionally, the Company issued 422,632 finders' (brokers') warrants exercisable at $2.72 until October 29, 2022, having a fair value of $392,000. These share issue costs were recorded as a reduction of share capital. Additionally, the Company issued 79,242 common shares to the agents with a fair value of $215,538 ($2.72 per share) as a corporate finance fee. The issuance of these common shares had a net $nil effect on share capital as it was recorded as a share issue cost reduction to share capital.

(Expressed in Canadian Dollars)

7. SHARE CAPITAL AND RESERVES (continued)

Reserves

The Company has an Omnibus Equity Incentive Plan (the "Equity Plan") effective October 2021, which superseded a previous stock option plan. The Equity Plan provides for the grant of stock options, RSUs, DSUs, and performance share units ("PSUs"). Under the Equity Plan, the maximum number of equity-based awards issued cannot exceed 10% of the Company's currently issued and outstanding common shares. Additionally, RSUs are required to be settled by December 31 in the third year following the year of grant ("Expiry date"), whereas DSUs are settled once the awardee retires or departs.

Stock options

In accordance with the Equity Plan, the exercise price of each stock option shall not be less than the discounted market price of the Company's common shares as calculated on the date immediately prior to the date of grant. The stock options can be granted for a maximum term of ten years, and vest at the discretion of the Board of Directors. These terms remain consistent from the former stock option plan.

A summary of the status of the Company's stock options as at December 31, 2021 and December 31, 2020, and changes during the years then ended is as follows:

	Year ended December 31, 2021		Year ended December 31, 2020	
	Options #	Weighted average exercise price $	Options #	Weighted average exercise price $
Options outstanding, beginning of year	4,604,075	1.66	5,843,425	0.86
Granted	2,143,950	4.85	1,502,250	2.53
Exercised	(369,125)	1.18	(2,724,100)	0.42
Cancelled	(41,850)	2.84	(17,500)	1.25
Options outstanding, end of year	**6,337,050**	**2.76**	4,604,075	1.66

As at December 31, 2021, the Company has stock options outstanding and exercisable as follows:

	Options outstanding #	Options exercisable #	Exercise price $	Expiry date
(1)	25,000	25,000	0.70	March 10, 2022
	50,000	50,000	1.08	September 13, 2022
	150,000	150,000	1.14	January 3, 2023
	210,575	210,575	1.57	July 12, 2023
	1,347,625	1,347,625	2.52	July 20, 2023
	25,000	25,000	2.81	September 8, 2023
	2,375,000	2,375,000	1.28	November 12, 2023
	15,000	15,000	3.05	December 4, 2023
	1,366,750	1,140,000	5.10	February 1, 2024
	52,100	-	5.26	February 25, 2024
	40,000	10,000	4.90	June 7, 2024
	40,000	10,000	3.62	October 5, 2024
	240,000	-	3.14	December 2, 2024
	400,000	-	5.10	February 1, 2026
	6,337,050	**5,358,200**		

(1) These options were exercised subsequent to December 31, 2021 (Note 14).

(Expressed in Canadian Dollars)

7. SHARE CAPITAL AND RESERVES (continued)

Stock options (continued)

The following table summarizes the above information about the stock options outstanding as at December 31, 2021:

Exercise prices $	Options #	Weighted average remaining life (years)	Weighted average exercise price $
0.70 - 1.57	2,810,575	1.8	1.29
2.52 - 3.62	1,667,625	1.8	2.64
4.90 - 5.26	1,858,850	2.5	5.10
	6,337,050	**2.0**	**2.76**

The Company recorded the fair value of the stock options granted during the years ended December 31, 2021 and December 31, 2020 using the Black-Scholes option pricing model. The fair value is particularly impacted by the Company's stock price volatility. The fair values were determined using the following weighted average assumptions:

	December 31, 2021	December 31, 2020
Risk-free interest rate	0.4%	0.3%
Expected life of stock options (years)	3.4	3.0
Historical volatility	73.6%	71.4%
Dividend rate	0%	0%
Weighted average fair value per stock option granted	$ 2.43	$ 1.18

The total share-based payments expense for the year ended December 31, 2021 was $4,385,894 (2020 - $1,651,930), of which $4,269,158 (2020 - $1,651,930) is attributable to stock options that vested during the year then ended.

During the year ended December 31, 2020, the Company granted 15,000 stock options with a fair value of $15,000 in lieu of cash to a service provider for leasehold improvements. The fair value was capitalized to property and equipment.

During the year ended December 31, 2021, 41,850 unvested stock options were cancelled upon certain employees leaving employment of the Company. As a result, the original share-based payments expense of $55,702 was reversed from reserves and credited to deficit.

During the year ended December 31, 2020, 17,500 stock options were cancelled upon termination of consulting contracts. As a result, the original share-based payments expense of $14,013 was reversed from reserves and credited to deficit.

(Expressed in Canadian Dollars)

7. SHARE CAPITAL AND RESERVES (continued)

Restricted share units and deferred share units (RSUs / DSUs)

In accordance with the Equity Plan, RSUs and DSUs are granted to directors, officers, employees, and consultants as part of long-term incentive compensation. The number of Equity Incentives awarded, and underlying vesting conditions are determined by the Company. Additionally, at the Company's sole discretion, upon each vesting date participants receive (a) common shares equal to the number of Equity Incentives that vested; (b) a cash payment equal to the number of vested Equity Incentives multiplied by the fair market value of a Voting Share; or (c) a combination of (a) and (b).

On the grant date of RSUs and DSUs, the Company determines whether it has a present obligation to settle in cash. If the Company has a present obligation to settle in cash, the RSUs and DSUs are accounted for as liabilities, with the fair value remeasured at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period. The Company has a present obligation to settle in cash if the Company has a past practice or a stated policy of settling in cash, or generally settles in cash whenever the counterparty asks for cash settlement. If no such obligation exists, RSUs and DSUs are accounted for as equity settled share-based payments and are valued using the share price of the common shares on the grant date. Since the Company controls the settlement, the RSUs and DSUs are considered equity settled.

Pursuant to the underlying agreements, all Equity Incentives granted to date are to be settled in common shares.

A summary of the status of the Company's Equity Incentives as at December 31, 2021 and December 31, 2020, and changes during the years then ended is as follows:

	Year ended December 31, 2021	Year ended December 31, 2020
	Equity Incentives #	Equity Incentives #
Equity Incentives outstanding, beginning of year	-	-
Granted - RSUs	184,505	-
Granted - DSUs	8,626	-
Equity Incentives outstanding, end of year	**193,131**	-

As at December 31, 2021, the Company has RSUs and DSUs outstanding as follows:

RSUs outstanding #	DSUs outstanding #	Vested #	Weighted average grant date fair value per RSU & DSU	Final vesting date	Expiry date
184,505	-	-		August 27, 2023	December 31, 2024
-	8,626	-		August 27, 2023	n/a
184,505	**8,626**	**-**	**4.17**		

During the year ended December 31, 2021, the Company granted 184,505 RSUs and 8,626 DSUs to officers and directors of the Company, whereby one-third (64,377) of the RSUs and DSUs vest on August 27, 2022, one-third (64,377) vest on August 27, 2023, and the remaining one-third (64,377) vest on August 27, 2024.

The value of the Equity Incentives granted was based on the fair value of the Company's common shares on the date of grant. Accordingly, the Equity Incentives were granted at a fair value of $4.17 each for a total value of $805,356 which is being recognized within share-based payment expense as the Equity Incentives vest.

The total share-based payments expense for the year ended December 31, 2021 was $4,385,894, of which $116,736 (2020 - $nil) is attributable to vesting of Equity Incentives granted during the year then ended with the remaining portion of share-based payment expense being attributable to the vesting of stock options, as described above.

(Expressed in Canadian Dollars)

7. SHARE CAPITAL AND RESERVES (continued)

Warrants

As an incentive to complete equity financings, the Company may issue units which include common shares and common share purchase warrants. Using the residual value method, the Company determines whether a value should be allocated to warrants attached to units sold in equity financings. Finders' or brokers' warrants may be issued as equity financing share issue costs and are valued using the Black-Scholes option pricing model.

A summary of the Company's common share purchase warrants as at December 31, 2021 and December 31, 2020, and changes during the years then ended is as follows:

	Year ended December 31, 2021		Year ended December 31, 2020	
	Warrants #	Weighted average exercise price $	Warrants #	Weighted average exercise price $
Warrants outstanding, beginning of year	5,561,328	2.52	676,500	1.60
Issued - attached to units	-	-	7,423,950	2.29
Issued - underwriters'/finders' warrants	324,299	5.35	890,372	2.13
Exercised	(1,516,440)	2.93	(3,396,494)	1.74
Expired	-	-	(33,000)	1.60
Warrants outstanding, end of year	**4,369,187**	**2.59**	5,561,328	2.52

As at December 31, 2021, the Company has warrants outstanding and exercisable as follows:

Warrants #	Weighted average exercise price $	Expiry Date	Weighted average remaining life (years)
324,299	5.35	April 1, 2022	0.2
31,316	2.72	October 29, 2022	0.8
1,583,100	3.55	October 29, 2022	0.8
2,354,379	1.60	February 21, 2023	1.1
76,093	1.60	February 21, 2023	1.1
4,369,187	**2.59**		**1.0**

During the year ended December 31, 2021, the Company issued 324,299 compensatory underwriters' warrants upon closing of the short-form prospectus financing in April 2021 (2020 - 890,372 compensatory finders' warrants were issued). The Company recorded the fair value of the warrants issued using the Black-Scholes option pricing model. The fair value is particularly impacted by the Company's stock price volatility. The fair values were determined using the following weighted average assumptions:

	December 31, 2021	December 31, 2020
Risk-free interest rate	0.2%	0.8%
Expected life of warrants (years)	1.0	2.5
Historical volatility	96.0%	64.3%
Dividend rate	0%	0%
Weighted average fair value per finders' warrant issued	$ 1.98	$ 0.75

8. RELATED PARTY TRANSACTIONS

Key management personnel are the persons responsible for the planning, directing, and controlling the activities of the Company and includes both executive and non-executive directors, and entities controlled by such persons. The Company considers all directors and officers of the Company to be key management personnel.

(Expressed in Canadian Dollars)

8. RELATED PARTY TRANSACTIONS (continued)

The following transactions were carried out with key management (gross before applicable government assistance recoveries):

	Transactions year ended December 31, 2021	Transactions year ended December 31, 2020	**Balances outstanding December 31, 2021**	Balances outstanding December 31, 2020
	$	$	**$**	$
Bedrock Capital	150,000	258,500	-	-
DBM CPA	117,925	91,500	8,400	7,875
Directors' fees	86,250	79,000	-	-
Management and directors' fees	354,175	429,000	8,400	7,875
Officers - Salaries and benefits / research expenses	1,172,800	830,000	631	2,696
Directors and officers - Share-based payments	3,756,185	1,339,100	-	-
Professional fees	188,584	191,635	15,993	38,753
	5,471,744	2,789,735	**25,024**	49,324

(a) Management and directors' fees:

- Includes the services of Bedrock Capital Corp. ("Bedrock Capital") a company controlled by Paul Matysek the Chairman and a Director of the Company;
- Includes the services of Donaldson Brohman Martin, CPA Inc. ("DBM CPA"), a firm in which Dan Martino, CFO is a principal; and
- Includes fees paid to the Company's directors for their positions as non-executive directors and/or board committee members or chairpersons (Lyle Brown, $33,375 (2020 - $39,500), Joseph Guy, $28,375 (2020 - $39,500), Gord Kukec, $22,625 (2020 - $nil), Paul Matysek, $1,875 (2020 - $nil)).

(b) Professional fees:

- Includes the services of Patent Filing Specialists Inc. ("Patent Filing Specialists"), a company controlled by Joseph Guy, a Company Director. Transactions incurred during the year ended December 31, 2021 are included within both intangible assets and professional fees (2020 – professional fees only).

(c) Salaries and benefits (including allocations to research expenses, net):

- Includes salaries and short-term variable cash-based compensation incentives paid to Dan Blondal, CEO ($397,900 (2020 - $362,500)), Stephen Campbell, CTO ($252,000 (2020 - $180,000), John Lando, Former President until November 30, 2021 ($283,150 (2020 - $287,500)), Alex Holmes, COO ($204,750 (2020 - $nil)), and Pamela Kinsman, Corporate Secretary and Director of Sustainability and Corporate Affairs ($35,000 (2020 - $nil)). Expense reimbursements outstanding as at December 31, 2021 related to Alex Holmes (2020 - related to Dan Blondal).

  In accordance with an executive employment agreement the Company has in place with Dan Blondal, in case of termination by the Company without cause, he is entitled to six (6) weeks' base pay (or notice) for every year of service to a maximum of twenty-four (24) months. He would not be entitled to further bonus payments after termination. In the case of resignation after a Change of Control and for 'Good Reason', Dan Blondal is entitled to twenty-four (24) months' base salary.

(d) Share-based payments:

- Includes amounts recognized on vesting of stock options and Equity Incentives granted to directors and officers.
- During the year ended December 31, 2021, 1,580,000 stock options were granted to directors and officers which are exercisable at either $3.62 or $5.10 each. 400,000 of these stock options have a five year term expiring in February 2026, with the remainder having three year terms expiring in either February 2024 or October 2024. The stock options have varying vesting terms. During the year ended December 31, 2020, 1,140,000 stock options were granted to directors and officers exercisable at $2.52 each until July 20, 2023 which vested immediately on grant.
- In October 2021, the Company granted 184,505 RSUs and 8,626 DSUs to various directors and officers (2020 – none were granted). See Note 7 for specifics on vesting terms.

(Expressed in Canadian Dollars)

9. SUPPLEMENTAL CASH FLOW INFORMATION

The Company incurred non-cash investing and financing activities during the years ended December 31, 2021 and December 31, 2020 as follows:

	December 31, 2021 $	December 31, 2020 $
Non-cash investing activities:		
Property and equipment included in accounts payable and accrued liabilities	5,535	189,918
Grant of stock options for additions to property and equipment	-	15,000
Deposits on property and equipment in accounts payable and accrued liabilities	14,488	36,555
Non-cash financing activities:		
Addition or extension of right-of-use asset	205,300	566,900
Shares issued for finance fee	-	215,538
Fair value of finders' warrants issued	641,100	673,300

During the years ended December 31, 2021 and December 31, 2020, no amounts were paid for interest or income taxes.

10. MANAGEMENT OF CAPITAL

The Company considers its capital structure to consist of its components of shareholders' equity. When managing capital, the Company's objective is to ensure that it continues as a going concern, to ensure it has sufficient capital to deploy on new and existing projects (including the requirement for matching funds relating to the SDTC program) (Note 6), as well as generating returns on excess funds while maintaining accessibility to such funds. In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors relies on the expertise of the Company's management to sustain future development of the business. Management reviews and adjusts its capital structure on an ongoing basis.

The Company is not subject to any externally imposed capital requirements. There were no changes to the Company's approach to capital management during the year ended December 31, 2021.

The Company currently has no source of revenues, though it receives funding from government programs (Note 6), and certain research cost recoveries from strategic partners. Additionally, the Company has historically relied upon equity financing to fund its activities. In order to fund ongoing research activities and pay for operating expenses, the Company will spend its existing working capital and may complete additional equity financings to facilitate the management of its capital requirements.

Additionally, the Company may seek to invest excess capital in guaranteed investment certificates ("GICs") bearing fixed rates of interest that are either redeemable (cash equivalents) or non-redeemable (short-term investments) and have terms not exceeding 24 months. The Company will also hold excess capital in high-interest savings accounts ("HISAs") which bear interest at variable rates (classified as cash equivalents).

As at December 31, 2021, the Company had excess capital invested in HISAs which are accessible on demand and did not have any GIC or other short-term investment holdings. The primary source of interest income earned during the year then ended was from HISAs.

11. FINANCIAL INSTRUMENTS

Financial instruments - fair value

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 - Inputs other than quoted prices that are observable for the assets or liability either directly or indirectly; and
- Level 3 - Inputs that are not based on observable market data.

Financial instruments - classification

Financial assets:	Classification and measurement:
Cash and cash equivalents	FVTPL
Receivables	Amortized cost
Deposits	Amortized cost

Financial liabilities:	Classification and measurement:
Accounts payable and accrued liabilities	Amortized cost
Accounts payable to related parties	Amortized cost
Lease liabilities	Amortized cost

The Company's financial instruments, with the exception of cash and cash equivalents approximate their fair values. Cash and cash equivalents under the fair value hierarchy is based on Level 1 quoted prices in active markets for identical assets or liabilities. The carrying value of lease liabilities approximates its fair value due to being discounted with a rate of interest that approximates market rates.

Financial instruments - risk

The Company's financial instruments can be exposed to certain financial risks including liquidity risk, credit risk, interest rate risk, price risk, and currency risk.

a) Liquidity risk

Liquidity risk is the risk that the Company is unable to meet its financial obligations as they come due. The Company manages this risk by careful management of its working capital to ensure its expenditures will not exceed available resources. The Company has historically relied upon equity financings and government assistance programs to satisfy its capital requirements and will continue to depend upon these sources to finance its activities until such time that the Company commences generating profitable operations.

11. FINANCIAL INSTRUMENTS (continued)

Financial instruments - risk (continued)

b) Credit risk

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk on its cash and cash equivalents, receivables, and deposits.

The Company minimizes its credit risk on its cash and cash equivalents, by holding the funds with a high-credit quality Canadian chartered bank. Management believes that the Company's credit risk attributable to its various components of receivables is low.

The Company is also exposed to credit risk relating to its deposits (comprised of facility lease security deposits, corporate credit card collateral, and deposits on equipment purposes) in which management believes the risk to be low. The Company's deposits are subject to the expected credit loss model for impairment testing. The Company applies the IFRS 9 simplified approach to the deposits to measure expected credit loss which uses a lifetime expected loss allowance. The deposits have been assessed based on debtor circumstances and are considered to be low risk.

c) Interest rate risk

The Company is exposed to interest rate risk because of fluctuating interest rates. The Company's exposure to variable interest rates is limited to cash equivalents held in HISAs, and a deposit held as collateral with a Canadian chartered bank on the Company's corporate credit cards.

For the year ended December 31, 2021, every 1% fluctuation in interest rates would have impacted loss and comprehensive loss for the year by approximately $392,000 (2020 – $138,000).

d) Price risk

Equity price risk is defined as the potential adverse impact on the Company's results of operations and the ability to obtain equity financing due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors the individual equity movements to determine the appropriate course of action to be taken by the Company. Fluctuations in value may be significant.

e) Currency risk

Currency risk is the risk of fluctuation in profit or loss that arises from fluctuations in foreign exchange rates and the degree of volatility of those rates. The Company is exposed to currency risk as it incurs certain transactions in United States dollar, and occasional transactions in the Euro, and the British Pound. Additionally, as at December 31, 2021, the Company held certain financial assets and liabilities that were denominated in these foreign currencies.

Based on the December 31, 2021 value of net assets denominated in foreign currencies, the impact of a 10% fluctuation in foreign exchange rates relative to the Canadian dollar would be insignificant to the Company's financial position and results of operations.

12. SEGMENTED INFORMATION

The Company operates in one business segment being the development of a patented process for the production of cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics (Note 1). The Company's non-current assets are located in Canada with the exception of certain patents (intangible assets) that are issued from patent regulators in foreign jurisdictions (Note 5).

(Expressed in Canadian Dollars)

13. INCOME TAXES

A reconciliation of income taxes at statutory rates with the reported taxes for the years ended December 31, 2021, and December 31, 2020, is as follows:

	December 31, 2021 $	December 31, 2020 $
Loss for the year	(11,323,108)	(5,218,408)
Expected income tax (recovery)	(3,057,000)	(1,407,000)
Change in tax resulting from:		
Permanent differences	1,187,000	725,000
Change in recognized deductible temporary differences	2,572,000	1,200,000
Share issue costs	(715,000)	(504,000)
Adjustment to prior year provision versus statutory tax returns and other	13,000	(14,000)
Total income tax expense (recovery)	**-**	-

The Company's unused temporary differences, unused tax credits, and unused tax losses that have not been included on the statements of financial position as at December 31, 2021 and December 31, 2020, are as follows:

	December 31, 2021 $	**Expiry Date Range**	December 31, 2020 $	Expiry Date Range
Property and equipment	5,587,000	No expiry	4,539,000	No expiry
Right-of-use asset / lease liability	105,000	No expiry	44,000	No expiry
Investment tax credits	-	2035	29,000	2035
Share issue costs	3,241,000	2042 to 2045	1,535,000	2041 to 2044
Non-capital loss carry forwards	22,247,000	2026 to 2041	15,459,000	2026 to 2040

Tax attributes are subject to review, and potential adjustment, but tax authorities.

14. SUBSEQUENT EVENTS

The Company has received proceeds of $59,532 upon the exercise of stock options and warrants as described below:

- The Company issued 25,000 common shares upon the exercise of stock options at $0.70 each for proceeds of $17,500; and
- The Company issued 26,270 common shares upon the exercise of warrants at $1.60 each for proceeds of $42,032.

Nano One Materials Corp.

Management's Discussion & Analysis

December 31, 2021

PREPARATION OF MANAGEMENT'S DISCUSSION & ANALYSIS

The following Management's Discussion & Analysis ("MD&A") of Nano One Materials Corp. ("Nano One" or the "Company") for the year ended December 31, 2021, should be read in conjunction with the Company's annual audited financial statements for the year ended December 31, 2021. The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All monetary amounts in this MD&A are expressed in Canadian dollars, unless otherwise indicated.

The information contained herein is presented as at **March 28, 2022** (the "MD&A Date"), unless otherwise indicated.

Additional information relating to the Company, including the Annual Information Form ("AIF") dated March 28, 2022, is filed with Canadian securities regulatory authorities on SEDAR (the System for Electronic Document Analysis and Retrieval) (www.sedar.com) and on the Company's website at www.nanoone.ca.

The Company's head office is located at Unit 101B, 8575 Government Street, Burnaby, British Columbia V3N 4V1 and its registered and records office is located at 2900 - 550 Burrard Street, Vancouver, British Columbia V6C 0A3.

For the purposes of preparing this MD&A, Management, in conjunction with the Board of Directors, considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of Nano One's common shares; or (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board of Directors, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONROLS OVER FINANCIAL REPORTING

The Company's disclosure controls, and procedures ("DC&P") are designed to provide reasonable assurance that relevant information is gathered and reported to senior management, including the Chief Executive Officer and the Chief Financial Officer, on a timely basis so that appropriate decisions can be made regarding public disclosures. We have also designed internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. During the year ended December 31, 2021, there were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

FORWARD-LOOKING STATEMENTS

This MD&A contains certain "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements"), within the meaning of applicable Canadian securities laws, which are based upon the Company's current internal expectations, estimates, projections, assumptions, and beliefs. All information, other than statements of historical facts, included in this MD&A that addresses activities, events or developments that the Company expects or anticipates will or may occur in the future is forward-looking information. Such statements can be identified by the use of forward-looking terminology such as "expect", "likely", "may", "will", "should", "intend", or "anticipate", "potential", "proposed", "estimate" and other similar words, including negative and grammatical variations thereof, or statements that certain events or conditions "may" or "will" happen, or by discussions of strategy. Forward-looking statements include estimates, plans, expectations, opinions, forecasts, projections, targets, guidance, or other statements that are not statements of fact. Such forward-looking statements are made as of the date of this MD&A and, except as required by law, the Company is under no obligation to update or alter any forward-looking information.

Forward-looking statements in this MD&A may include, but are not limited to, statements with respect to: the use of the net proceeds from previous financings; the performance of the Company's business and operations; the intention to grow the business, operations and potential activities of the Company; regulatory changes; the competitive conditions of the industry and the Company's competitive position in the industry; the Company's business plans and strategies; the anticipated benefits of the Company's partnerships; the Company's licensing, supply chain and joint venture opportunities; the applicable laws, regulations and any amendments thereof; and any anticipated future gross revenues and profit margins of the Company's operations.

With respect to the forward-looking statements contained in this MD&A, the Company has made assumptions regarding, among other things: the use of the net proceeds of previous financings; operating and capital costs; anticipated partnerships; the Company's ability to access future financing opportunities; and the Company's ability to attract and retain qualified personnel or management. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. The Company cannot guarantee future results, levels of activity, performance, or achievements. There are risks, uncertainties, and other factors, some of which are beyond the Company's control, which could cause actual results, performance or achievements of the Company, as applicable, to differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements contained in this MD&A.

RISKS AND UNCERTAINTIES

Risk is inherent in all business activities and cannot be entirely eliminated. An investment in Nano One's common shares involves risk. Investors should carefully consider the risks and uncertainties described below and, in the AIF, filed with Canadian securities regulators (www.sedar.com) which may not be a comprehensive list of risks and uncertainties as additional risks and uncertainties, including those unknown by the Company at this time, or are currently considered immaterial, may exist, and other risks may apply.

DESCRIPTION OF THE BUSINESS

The Company has developed, patented and scaled-up an innovative patented manufacturing technology (the "One-Pot Process") for the production of cathode active materials ("CAM") for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics. Nano One has proven its technology in the laboratory, built a demonstration pilot plant, and is partnering with key automotive OEMs and cathode manufacturers.

Nano One's technology is intended to improve the performance and cost of cathode materials, reduce complexity and excess waste in the supply chain, minimize carbon footprint and simplify production using environmentally sustainable processes. It is a manufacturing platform suited to many types of lithium-ion cathode materials, which may be used in automotive, grid storage and consumer electronic batteries, including standard, advanced, and next generation solid state batteries.

The Company's first addressable market is cathode materials for lithium-ion rechargeable batteries for electric vehicles, energy storage systems, and consumer electronics. There is growing demand in the lithium-ion battery market for more cost effective, higher performance, and environmentally sustainable energy storage solutions. Nano One's technology also has potential applications in other markets that require specialty mixed metal ceramic powders.

One-Pot Process Technology

Nano One's One-Pot Process is engineered to use non-sulfate forms of metal feedstock, with the intention of reducing total cost and carbon footprint of feedstock needs per kilogram of CAM, eliminating the need to convert metal to sulphate, thereby removing downstream sulphate waste equivalent to nearly two times the CAM product volume and it reduces water consumption, GHG emissions and added process costs. Furthermore, the process uses lithium feedstock in the form of carbonate rather than hydroxide which is more costly, corrosive and harder-to-handle. The process is feedstock flexible which enables improved optionality of sourcing of raw materials. The process also forms innovative coated nanocrystal cathode powders that are designed to be more durable than conventional cathode powders.

The nanocrystal innovation addresses a fundamental battery trade-off between energy density and durability. Increased durability provides electric vehicle manufacturers greater flexibility in optimizing range, charging rates, safety, and cost. The One-Pot Process combines all input components: lithium, metals, additives, and coatings in a single reaction to produce a precursor that, when dried and fired, forms quickly into a single nanocrystal cathode material simultaneously with its protective coating.

Product Developments

The Company's primary cathode formulations under development include:

- Lithium Nickel Manganese Cobaltate (NMC622, NMC811, and Ni>90% NMC);
- Lithium Nickel Manganese Oxide (LNMO, or High Voltage Spinel HVS); and
- Lithium Iron Phosphate (LFP).

Further details about the Company's process developments and product developments can be found in the AIF.

M2CAM® Technology

In February 2021, Nano One announced the launch of its Metal to Cathode Active Material ("M2CAM") technology which reduces cost, reduces waste, and reduces the carbon footprint in the lithium-ion battery supply chain. The Company commenced or continued discussions with large integrated miners to reduce environmental footprints and maximize upstream value in the global battery supply chain. Nano One's other collaborators include automotive OEMs with similar motivations to meet environmental targets by reducing waste, carbon emissions, logistics and costs. Patents are pending for M2CAM and preliminary test results are showing battery capacity up to 5% higher than cathode materials currently made from metal salts.

Nano One's patented One-Pot Process forms durable single crystal cathode powders and protective coatings simultaneously and the process has been adapted for M2CAM, enabling these materials to be made directly from metal powders. Metal powders are one-fifth of the weight of metal sulfates, avoiding the added costs, energy and environmental impact of converting to sulfate and shipping and handling of waste. The One-Pot Process is an aqueous process, using carbon neutral chemistry, that operates at room-temperature and atmospheric pressures, and it combines feedstock conversion, precursor formation, lithiation and coating steps into one reaction. This creates added value for metals and aligns Nano One with the environmental, sustainability and cost objectives of automotive companies, miners, investment communities and governmental infrastructure initiatives.

BUSINESS OBJECTIVES

In the near term (one to three years), Nano One intends to focus on:

- Developing, advancing and promoting its One-Pot, M2CAM and coated nano-crystal technologies through collaborative partnerships with OEMs, miners and cathode producers. The Company is aiming to disrupt the supply chain and make nickel-based cathode materials direct from metal powders and lithium carbonate. This will eliminate: (i) the conversion of metals to sulfates and lithium to hydroxide, (ii) the associated energy, GHG emissions, cost, and waste and (c) the unnecessary transport of water and sulfate.
- Prototyping and scaling up by expanding its demonstration pilot plant and laboratory facilities to serve technology development, partnership and licensing objectives.
- Developing, building and operating pilot, demonstration and commercial plants in collaboration with its strategic partners, and generating revenue through licensing and joint venture arrangements that are still in various stages of business development.
- Identifying and validating additional joint development partners throughout the supply chain.

CHANGE IN BOARD OF DIRECTORS

During the year ended December 31, 2021, and subsequent thereto, the Company had the following appointments to its Board of Directors:

- Effective September 7, 2021, Mr. Gordon Kukec was appointed as an independent Director; and
- Effective December 16, 2021, Ms. Carla Matheson was appointed as an independent Director.

Effective November 30, 2021, Mr. John Lando retired from the Company's Board of Directors and resigned from his position as President of the Company. During the year ended December 31, 2021, and subsequent thereto, there were no additional changes to officers or directors of the Company.

RECENT CORPORATE DEVELOPMENTS

In addition to information discussed throughout this MD&A, the Company announced the following developments during the year ended December 31, 2021 and through to the date of this MD&A (from newest to oldest):

Funding to Advance M2CAM and Thermal Processing Initiatives

On March 3, 2022, the Company announced that it will be receiving advisory services and funding of up to $404,000 from the National Research Council of Canada Industrial Research Assistance Program ("NRC-IRAP") to support a research and development project to advance its M2CAM technology and thermal processing innovations. The project will further advance cost optimization of the One-Pot Process for the manufacture of CAM, specifically as it relates to use in metal feedstocks enabled by Nano One's M2CAM technology and innovations in the final stage of thermal processing.

Successful Completion of Phase One of Co-Development Agreement with Niobium Producer CBMM

On February 15, 2022, the Company announced that it has successfully completed Phase One of its advanced lithium-ion battery cathode materials coating development agreement with CBMM, the world's leading supplier of niobium products and technology. Nano One has successfully demonstrated the use of CBMM's niobium to form a protective coating on Nano One's single nanocrystal NMC cathode active material. This coating is designed to enhance durability, and the success on this first milestone strengthens the supply chain relationship between CBMM and Nano One while providing yet another demonstration of the flexibility of Nano One's patented One-Pot process.

Phase One applied the niobium coating technology to NMC811 cathode active material and the next two phases will focus on the niobium coating of even higher nickel NMC. This will include scaling of the One-Pot coating technology to demonstrate commercial viability and validate the supply chain. Together, CBMM and Nano One are developing an integrated and differentiated supply chain for niobium coated single crystal cathode materials.

Nano One's patented One-Pot process adds a cost effective niobium coating on each individual nanocrystal to protect the cathode from deleterious side reactions than can otherwise cause rapid performance degradation. The One-Pot process enables this coating to be formed without adding process steps or costs, and the coating can significantly increase the durability of cathode materials in lithium-ion batteries. The niobium-coated single crystal cathode materials are applicable to both conventional liquid electrolyte cells and advanced solid state electrolyte cells.

Engineering Study Supports the Benefits of the One-Pot Process and M2CAM

On January 24, 2022, the Company announced the successful completion of an industrial scale engineering study conducted by Hatch Ltd. (Hatch) a leading global engineering firm. This is another important step forward in Nano One's efforts to bring the latest innovations in cathode manufacturing technology through scale-up towards commercialization. The study supports that Nano One's patented One-Pot M2CAM process offers both environmental and potential economic benefits when compared to conventional cathode manufacturing processes.

The engineering study set out to compare the conventional sulfate process for manufacturing CAM with Nano One's One-Pot M2CAM process for nickel rich cathode materials. Conventional cathode manufacturing produces approximately 1.8 times more weight in sodium sulfate waste than it does in CAM product, whereas Nano One's process produces no waste. It is estimated the One-Pot M2CAM process also reduces water consumption by approximately 60% prior to recycling. Further, the Hatch work supports that the Nano One's process significantly reduces the number of process steps to get to a single crystal coated cathode active material helping reduce costs and create efficiencies. The report estimates competitive economics for Nano One and its One-Pot process over conventional cathode processes and identifies opportunities for further cost savings, despite One-Pot having over 20-years less industrial optimization. Work is already underway on further optimizations.

Expansion of Team and Advisors

Throughout November and December 2021, the Company announced the engagement of Mr. Dennis Geoffroy as a consultant, the hiring of Adam Johnson (VP, External Affairs), the engagement of Dr. Yuan Gao (Strategic Advisor), and the engagement of Frank Fannon (Fannon Global Advisors, as a Strategic Advisor). Expansion of the Company's team of advisors is in effort to strengthen and enhance Nano One's innovation, commercialization, North American scale-up programs, and strategic communications/external affairs with governments.

Transition in LFP Strategy and Accelerate ZEV Alliance Membership

On November 9, 2021, the Company announced a transition in LFP strategy towards creating a secure and cost competitive supply chain that is domestically integrated with a low environmental footprint. This involves a shift in its LFP strategic direction to large emerging markets outside of China, starting in North America, and has ceased joint development activities with Pulead Technology Industry.

The goal towards building a fully integrated and resilient battery supply chain in North America must include responsible mining of battery metals, onshore refining, environmentally favourable cathode material production, and recycling. LFP production is free from the constraints of nickel and cobalt, and although its origins are deeply rooted in Canada, its growth over the last decade is almost entirely based in China. Recent LFP cell-to-pack innovations have driven costs down and enabled greater EV range, setting the stage for EV pioneers to shift to LFP. There has never been a greater imperative for a sustainable, responsible, and secure supply of LFP materials and batteries, to be established and supported in North America and Europe, proximal to where the EV's are manufactured.

Canada has clean energy assets, responsibly sourced critical minerals and a rich history in LFP technology and manufacturing. By leveraging these opportunities with Nano One's simplified low-cost approach to cathode production, Nano seeks to create a resilient value-added domestic LFP supply chain in a collaborative ecosystem with a smaller environmental footprint.

Additionally, Nano One announced it has become a member of Accelerate, Canada's zero-emission vehicle (ZEV) supply chain alliance. Launched in 2021, Accelerate is working with its members across the supply chain to create an industrial road map to ensure the growth and stability of Canada's zero- emission vehicle market.

Joint Development Agreement signed with Euro Manganese

On October 4, 2021, the Company announced the signing of a Joint Development Agreement with Euro Manganese Inc. (“Euro Manganese”), a battery raw materials company developing a significant manganese deposit in the Czech Republic.

The two companies will collaborate on developing economically viable and environmentally sustainable applications of high-purity manganese expected to be produced by Euro Manganese from its proposed Chvaletice Manganese Project. The manganese will be evaluated by Nano One in the formation of its innovative cathode materials including LNMO (lithium nickel manganese oxide) and nickel-rich NMC (lithium nickel manganese cobalt oxide). LNMO and NMC materials will be prepared using Nano One’s patented One-Pot process, coated nanocrystal powders and M2CAM technology, enabling the use of sulfate-free metals and lithium carbonate as lower cost and environmentally more sustainable feedstocks.

Completion of 2019 Cathode Development Project with Global Automotive Company and New Agreement

On September 30, 2021, the Company announced the completion of a project with a global automotive OEM (Original Equipment Manufacturer), that was first announced on June 20, 2019 and the two parties have signed a Memorandum of Understanding (“MOU”) to evaluate manganese-rich cathode materials for potential use in automotive scale battery cells.

The completed project successfully demonstrated the synthesis, performance, and improved durability of a proprietary and experimental nickel-rich cathode formulation, using Nano One’s patented One-Pot process. The MOU is for the multi-phase development and evaluation of LNMO batteries using cathode materials prepared by Nano One. Work under the MOU will include performance testing, economic feasibility and future potential commercial collaboration for jointly developed battery cells using Nano One’s advanced LNMO cathode materials.

LNMO has great potential in next-generation lithium-ion batteries for electric vehicles, renewable energy storage and consumer electronic devices. It delivers energy and power on par with other high-performance cathodes and is cost effective because it is cobalt free, low in nickel and does not require excess lithium. LNMO also has an operating voltage that is 25% higher than commercial high nickel cathodes, enabling fewer cells in applications such as power tools and electric vehicles while providing improved productivity, efficiency, thermal management, and power.

Completion of SDTC and BC-ICE Milestone 2 and Receipt of Milestone 3 Funds

On September 9, 2021, the Company announced the achievement of Milestone 2 of the “Scaling Advanced Battery Materials” project jointly funded by SDTC and the British Columbia Innovative Clean Energy, Mines and Petroleum Resources (“BC-ICE”) fund. Consequently, the advance funding for project Milestone 3, in the amount of $1,652,859 in aggregate has been received.

Within Milestone 2, Nano One strengthened its process for both LFP and NMC cathode materials. Nano One’s capabilities and capacity have also significantly increased in this milestone through the addition of staff and equipment and additional laboratory space, pilot, and office facilities. Nano One is now focused on Milestone 3 which involves economic modelling and scaled up demonstration of both LFP and NMC.

Industrial Scale Engineering Study Added to Automotive Project

On August 17, 2021, the Company announced that its cathode evaluation program with a global automotive company has expanded in respect of the evaluation of NMC/LNMO cathode materials. The increased scope will include an engineering report that models cathode manufacturing at an automotive scale based on Nano One's patented One-Pot process, coated nanocrystal, and M2CAM technologies.

Nano One has engaged global engineering firm, Hatch Ltd., to lead an engineering study and provide a report to the automotive company. The report will be based on the engineering study being prepared for Nano One, and will include a Front-End Loading level 1 (FEL1) analysis on capital costs, operating costs, and a cost comparison of the Nano One process versus the conventional cathode material manufacturing process. The report will enable the companies to evaluate both the economic and environmental advantages of Nano One's patented One-Pot, M2CAM and coated nanocrystal process technologies at large industrial scale.

Graduation to the Toronto Stock Exchange

Effective June 8, 2021, Nano One commenced trading on the Toronto Stock Exchange (the "TSX") under the symbol "NANO". Nano One formerly traded on the Toronto Venture Exchange (the "TSX-V") under the symbol "NNO".

Joint Development Agreement with Johnson Matthey

In June 2021, the Company announced the execution of a joint development agreement with Johnson Matthey ("JM") a global leader in sustainable technologies. Under this agreement the companies are to co-develop next generation products and processes for Johnson Matthey's eLNO® family of nickel-rich advanced cathode materials using Nano One's patented One-Pot process and coated nanocrystal technology, for the low-cost, low-carbon footprint production of high-performance lithium-ion battery cathode materials.

On November 11, 2021, JM issued a news release about their plans to exit the battery materials business, which to Nano One, was unexpected.

Co-Development Agreement with CBMM

In May 2021, the Company announced the execution of an advanced lithium-ion battery cathode materials coating development agreement with CBMM, the global leader in the production and commercialization of niobium products and technologies. The objective of the agreement is to optimize Nano One's patented One-Pot process for nickel-rich cathode materials using small amounts of niobium from CBMM as a coating. Niobium is a key element in the advancement of lithium-ion battery cathode materials as it can be made to form a coating on the outer surface of each grain of a cathode powder. As a coating, niobium protects the highly reactive cathode from deleterious side reactions that can cause rapid degradation in high performance batteries while preventing the growth of interfacial resistance during battery cycling.

As announced above on February 15, 2022, the Company and CBMM had successfully completed Phase One of the co-development agreement.

Progress Update on Joint Development Agreement with Asian Manufacturer

In April 2021, the Company announced a progress update on the Joint Development Agreement signed in August 2020 (the "JDA"). The first two phases of the program have been focused on LNMO cathode materials and have been successfully completed with validation by both parties. At the time of the announcement, work was shifting to scale-up considerations, detailed economic analysis, third-party evaluation, and preliminary planning for commercialization. The work under this agreement is on schedule and on budget.

The JDA provides a framework to develop a business plan for the commercialization of cathode materials, through a joint venture, licensing of Nano One's technology and/or through further development work.

The companies are co-developing high-performance LNMO cathode materials using Nano One's patented One-Pot Process. LNMO is of increasing global interest and has great potential in next-generation lithium-ion batteries for electric vehicles, renewable energy storage and consumer electronic devices.

Intellectual Property

In June 2021, the Company announced three (3) new patents issued and allowed in Canada, the US and China. These patents extend the patent estate to provide protection for lithium-ion cathode powders formed by the proprietary One-Pot Process developed by Nano One. Additionally, during February 2022, the Company obtained another issued patent.

As at the MD&A Date, the Company has been issued twenty-one (21) patents which were issued by various jurisdictions including Canada, China, Japan, Korea, Taiwan, and the United States. The patents have expiries ranging between thirteen (13) to nineteen (19) years from the patent issuance date. The Company also has over forty (40) pending patent applications throughout the world.

The Company's intellectual property was developed and is wholly-owned by the Company. The Company has filed other patent applications and may file additional patents at a later date to further strengthen its intellectual property and technology going forward, although no assurances can be given that it will be successful in such endeavours. Additional information on the Company's intellectual property can be found in the Company's AIF.

Government Assistance

The Company's primary active government assistance program is that with SDTC, as follows:

Sustainable Development Technology Canada ("SDTC"):

In 2019, the Company executed a contribution agreement with SDTC for a non-repayable grant in respect of the Company's "Scaling Advanced Battery Materials" project. The SDTC Program #2 grant is for up to $8,545,500 ($5,944,376 received as at December 31, 2021) which includes BC-ICE contributions (discussed below). SDTC Program #2 is estimated to conclude in June 2024.

As of the date of this MD&A, the Company is currently working within Milestone 3 for which it received funding during September 2021 of approximately $1,653,000.

The Company receives funding from the Government of Canada for its research activities through various programs. During the years ended December 31, 2021 and December 31, 2020 the following amounts were received or accrued:

	December 31, 2021 $	December 31, 2020 $
Grant cash proceeds received:		
Sustainable Development Technology Canada (SDTC)	1,915,359	3,055,202
Innovation Assistance Program (IAP)	-	241,225
Automotive Supplier's Innovation Program (ASIP)	-	217,446
Industrial Research Assistance Program (NRC-IRAP)	33,372	182,285
Other Grants	-	2,700
	1,948,731	3,698,858
Grant cash proceeds accrued:		
Industrial Research Assistance Program (NRC-IRAP)	**47,652**	-

The cumulative amount of program funding received since January 1, 2014 from the Government of Canada are as follows:

	December 31, 2021 $	December 31, 2020 $
Sustainable Development Technology Canada (SDTC)	8,025,672	6,110,313
Automotive Supplier's Innovation Program (ASIP)	1,950,952	1,950,952
Industrial Research Assistance Program (NRC-IRAP)	828,338	794,966
Innovation Assistance Program (IAP) (from NRC-IRAP)	241,225	241,225
Scientific Research & Experimental Development (SR&ED)	98,661	98,661
Other Grants	80,059	80,059
	11,224,907	9,276,176

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OVERALL PERFORMANCE

Further to the "Recent Corporate Developments" as discussed above, the Company generated a net increase in cash and cash equivalents during the year ended December 31, 2021, of approximately $24,902,000 inclusive of the Short Form Prospectus financing of common shares completed on April 1, 2021 for gross proceeds of approximately $28,917,000 (approximately $26,900,000 net proceeds after cash commissions and expenses).

Other key contributors to the increase in cash and cash equivalents were:

- Exercises of stock options and warrants for total proceeds of approximately $4,882,000;
- Proceeds from Government assistance programs mainly comprising approximately $1,915,000 from SDTC and BC-ICE; and
- The maturity of a short-term investment of approximately $1,009,000.

See "Cash flows for the year ended December 31, 2021" below within Discussion of Operations for further details on cash flows for the year.

SELECTED ANNUAL INFORMATION

The following table sets out selected historical financial information of Nano One. Such information is derived from the audited financial statements.

	December 31, 2021 $	December 31, 2020 $	December 31, 2019 $
Revenues	**-**	-	-
Loss and comprehensive loss	**(11,323,108)**	(5,212,408)	(3,781,180)
Loss per share - basic and diluted	**(0.12)**	(0.07)	(0.06)
Cash and cash equivalents	**52,652,258**	27,750,290	1,747,514
Total assets	**55,357,897**	30,959,027	2,932,912
Total liabilities	**1,602,926**	2,060,691	1,064,476
Shareholders' equity	**53,754,971**	28,898,336	1,868,436

FOURTH QUARTER

For the three months ended December 31, 2021 and December 31, 2020

The following table summarizes the Company's results of operations and cash flows for the three months ended December 31, 2021 and December 31, 2020 (rounded):

	Three months ended		
	December 31, 2021 $	December 31, 2020 $	**Change $**
Revenue	**-**	-	**-**
Loss from operating expenses	**(2,513,000)**	(2,142,000)	**(371,000)**
Loss and comprehensive loss	**(2,462,000)**	(2,104,000)	**(358,000)**
Cash used in operating activities	**(2,044,000)**	(2,945,000)	**901,000**
Cash (used in) provided by investing activities	**(70,000)**	154,000	**(224,000)**
Cash provided by financing activities	**137,000**	16,618,000	**(16,481,000)**

Cash used in investing activities during the three months ended December 31, 2021, is attributable to the excess of cash outflows on equipment deposits and purchases, net of government assistance proceeds towards purchases of equipment over interest income earned on high-interest savings accounts.

Cash provided by financing activities during the three months ended December 31, 2021, is attributable to the exercise of options and warrants of approximately $189,000 during the period then ended, offset by facility lease payments of approximately $52,000. The cash provided by financing activities in the comparative period reflected the net proceeds from the Short Form Prospectus offering completed in October 2020 of approximately $13,000,000, and greater volumes and amounts of exercises of options and warrants.

Certain components of operating expenses for the three months ended December 31, 2021 and December 31, 2020, were as follows (rounded):

	Three months ended		
	December 31, 2021 $	December 31, 2020 $	**Increase (decrease) $**
Consulting fees	**91,000**	116,000	**(25,000)**
Investor relations and shareholder information	**234,000**	170,000	**64,000**
Professional fees, net	**123,000**	40,000	**83,000**
Salaries and benefits, net	**349,000**	290,000	**59,000**

- Consulting fees:

  Consulting fees were primarily comprised of corporate advisory/advisory committee and increased consultancy services relating to cathode commercialization efforts including efforts towards emerging automotive scale opportunities in the LFP space. Additionally, human resources contractor costs decreased, while IT consulting increased given the Company's expanded workforce and increased IT infrastructure.

- Investor relations and shareholder information:

  Investor relations and shareholder information costs increased as a result of public relations fees primarily concentrated during Q4 2021 (three months ended December 31, 2021) as well as a general increase in marketing communication efforts throughout the year.

- Professional fees

  Professional fees were characterized by legal services relating to patent filings and maintenance, as well as an accrual for the year end audit fee, and legal services for general corporate matters. The increase from the comparative period is attributable to increased volume of services in all aspects and the annual audit fee accrual which is recorded in the fourth quarter of each year.

- Salaries and benefits:

  Staffing levels continue to increase in both the Company's corporate and research departments. Salaries and benefits are presented net of allocations of SDTC government grants.

  During the three months ended December 31, 2021, the Company welcomed 5 employees to its company-wide team.

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DISCUSSION OF OPERATIONS

The Company reports operating results in a single operating segment being the development and scale-up of a patented process for the production of cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics.

Research expenses

Research expenses, net for the three months and year ended December 31, 2021 and December 31, 2020, were as follows (rounded):

	Three months ended			Year ended		
	December 31, 2021 $	December 31, 2020 $	**Change $**	**December 31, 2021 $**	December 31, 2020 $	**Change $**
Contractors	**304,000**	35,000	**269,000**	**526,000**	170,000	**356,000**
Labour	**797,000**	603,000	**194,000**	**2,599,000**	1,733,000	**866,000**
Safety and training	**17,000**	26,000	**(9,000)**	**93,000**	62,000	**31,000**
Supplies	**230,000**	108,000	**122,000**	**709,000**	315,000	**394,000**
Utilities	**26,000**	12,000	**14,000**	**67,000**	32,000	**35,000**
	1,374,000	784,000	**590,000**	**3,994,000**	2,312,000	**1,682,000**
Depreciation	**159,000**	17,000	**142,000**	**550,000**	189,000	**361,000**
Cost recoveries	**(308,000)**	(18,000)	**(290,000)**	**(614,000)**	(242,000)	**(372,000)**
Government assistance (1)	**(385,000)**	360,000	**(745,000)**	**(1,797,000)**	(2,030,000)	**233,000**
Research expenses, net	**840,000**	1,143,000	**(303,000)**	**2,133,000**	229,000	**1,904,000**

(1) Government assistance for the three months ended December 31, 2020 was in a net expense position due to accounting adjustments recognized during the three months then ended.

In addition to the research expenses, net amount presented above, the Company incurred approximately $90,000 and $217,000 respectively, during the three months and year ended December 31, 2021, within professional fees, and before allocations of SDTC proceeds, for charges relating to patent filings and applications. Additionally, the Company incurred approximately $734,000 net of government grant allocations on research and development equipment, pilot plant, and leasehold improvements in aggregate during the year ended December 31, 2021.

Supplies costs primarily comprises chemical formulations which may be subject to fluctuations in commodity prices. Overall, the Company’s exposure to fluctuations in commodity prices has not had a significant impact on operations given the relative value of volumes purchased, but is expected to have an increasing impact on operations as volumes and costs increase in 2023 and beyond.

Contractors costs include costs for engineering studies such as the work performed by Hatch as discussed above, third-party researchers, and amounts paid to environmental agencies that assist with chemical supply removal. The Company is compliant to the best of its knowledge with all local required environmental waste and disposal regulations.

The Company’s facilities and staffing expansion is a direct result of the increasing global interest in clean technology, battery materials and production, the Company’s technologies and processes, progress through government programs, technological breakthroughs, and new strategic partnerships. Market dynamics coupled with the increased capital resources contribute to an overall increase in research activities and related expenditures in all or most categories, which works to expedite the achievement of the Company’s strategic goals.

Results from operations for the years ended December 31, 2021 and December 31, 2020

The following table summarizes the Company's results of operations and cash flows for the years ended December 31, 2021 and December 31, 2020 (rounded):

	Year ended		
	December 31, 2021 $	December 31, 2020 $	**Change $**
Revenue	**-**	-	**-**
Loss from operating expenses	**(11,391,000)**	(5,301,000)	**(6,090,000)**
Loss and comprehensive loss	**(11,323,000)**	(5,212,000)	**(6,111,000)**
Cash used in operating activities	**(7,019,000)**	(2,923,000)	**(4,096,000)**
Cash provided by (used in) investing activities	**317,000**	(1,512,000)	**1,829,000**
Cash provided by financing activities	**31,604,000**	30,438,000	**1,166,000**

Certain components of operating expenses for the years ended December 31, 2021 and December 31, 2020, were as follows (rounded):

	December 31, 2021 $	December 31, 2020 $	**Increase (decrease) $**
Consulting fees	**511,000**	456,000	**55,000**
Investor relations and shareholder information	**761,000**	566,000	**195,000**
Professional fees, net	**335,000**	219,000	**116,000**
Salaries and benefits, net	**1,823,000**	1,005,000	**818,000**

- Consulting fees:

  Consulting fees were substantially comprised of corporate advisory/advisory committee and consultancy services relating to cathode commercialization efforts including efforts towards emerging automotive scale opportunities in the LFP space. Despite increased consulting in this specific area, there was a decrease in costs within this component of consulting fees. Additionally, human resources fees and expenses increased, while IT consulting also increased given the Company's expanded workforce and IT infrastructure.

- Investor relations and shareholder information:

  The main component and driver of the increase in investor relations fees is the addition of public relations services and an increase in marketing communication efforts. Due to a decrease in conference and road show costs with no travel, additional marketing activities were engaged to increase market awareness.

- Professional fees

  Professional fees increased due to an increase in general corporate legal fees, and audit fees. The increase is also attributable to a lower allocation of SDTC proceeds towards the gross amounts incurred on professional fees.

- Salaries and benefits:

  Staffing levels continue to increase in both the Company's corporate and research departments. Salaries and benefits are presented net of allocations of SDTC government grants.

  During the year ended December 31, 2021, the Company welcomed 30 employees/contractors/interns to its company-wide team. As of the date of this MD&A, the Company has 66 employees and/or contractors.

Global Pandemic (COVID-19)

In March 2020, the World Health Organization declared the outbreak of COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or results of operations or on the Company's industry partners who provide in-kind and/or financial contributions to the Company's government programs. There are travel restrictions and health and safety concerns that may delay the Company's research activities. Operations depend on safeguarding all personnel during the outbreak, which may be prohibitive in certain aspects. Nonetheless, the Company has implemented prevention measures at its office and laboratory facilities including the facilitation of remote work programs. Overall, travel and other restrictions related to the COVID-19 pandemic have not had a significant impact on the Company's operations and research efforts including staffing levels. The shipment of purchased equipment at times has been partially delayed due to the pandemic, and travel by employees and executives has been limited, however, the Company continues to progress partnerships and research efforts without significant constraint.

Various Government wage and loan subsidies are available to qualified companies to assist them with operating costs during the pandemic, and the various programs are constantly being expanded and relaxed, which may qualify the Company for additional assistance. As at the MD&A Date, the Company had qualified for and received an additional $512,500 from SDTC ($262,500 of which was received during the year ended December 31, 2021), and approximately $241,000 from the Innovative Assistance Program (NRC-IRAP) (during the year ended December 31, 2020), both in relation to COVID-19 pandemic relief.

Cash flows for the year ended December 31, 2021

Cash used in operating activities was approximately $7,019,000, largely driven by $6,385,000 incurred on cash-based operating expenses plus approximately $634,000 in changes in working capital items. This equates to an average monthly operating burn rate of approximately $600,000 for the year ended December 31, 2021.

Cash provided by investing activities was approximately $317,000, driven by the maturity of a short-term investment (a fixed rate non-redeemable guaranteed investment certificate) including interest income received on the short-term investment and high-interest savings accounts of approximately $1,208,000 in aggregate, partially offset by approximately $891,000 in equipment and other deposits, purchases of property and equipment (primarily research equipment and leasehold improvements, net of government assistance amounts received) and payments for issuance costs of newly issued patents (intangible assets).

Cash provided by financing activities was approximately $31,604,000 substantially comprising the net proceeds from the Short Form Prospectus financing of common shares that closed in April 2021, and the exercise of stock options and warrants generating net proceeds of approximately $31,794,000 after cash commissions, legal and filing fees. Cash flows from financing activities are partially reduced by the basic rent portion of lease payments of the Company's facilities of approximately $190,000 in aggregate.

SUMMARY OF QUARTERLY RESULTS

The following table shows the results for the last eight fiscal quarters as prepared in accordance with IFRS and presented in Canadian dollars, the Company's functional currency:

Period Ending	Revenue $	Loss and comprehensive loss $	Basic and Diluted Loss Per Share $
December 31, 2021	-	(2,462,276)	(0.03)
September 30, 2021	-	(1,767,249)	(0.02)
June 30, 2021	-	(2,549,411)	(0.03)
March 31, 2021	-	(4,544,172)	(0.05)
December 31, 2020	-	(2,103,524)	(0.02)
September 30, 2020	-	(1,504,365)	(0.02)
June 30, 2020	-	(541,673)	(0.01)
March 31, 2020	-	(1,062,846)	(0.01)

There are no significant seasonal variations in quarterly results as the Company is not subject to significant seasonality in its research and corporate activities. The Company is exposed to currency risk as it incurs certain transactions in United States dollar, and occasional transactions in the Euro, and the British Pound. However, the Company has assessed that the impact of a 10% fluctuation in foreign exchange rates relative to the Canadian dollar would be insignificant to the Company's financial position and results of operations.

Variations in loss and comprehensive loss for certain of the above periods were affected primarily by the following factors:

- The quarter ended December 31, 2021, saw an increase in professional fees and consulting fees for the reasons addressed above in "Discussion of Operations" and "Fourth Quarter". Additionally, there were additional fees incurred on engineering studies, and a reduction in amounts recognized as government assistance which are offsets to reduce research expenses, net.
- The quarters ended June 30, 2021 and September 30, 2021, were reflective of a general increase in activities in all departments and projects for the Company including increased investor relations programs, increased research expenditures, and increased salaries and benefits reflective of an expanded workforce.
- The quarter ended March 31, 2021, included greater than normal share-based payment expense (non-cash) of approximately $3,070,000 in relation to the grant of stock options of which certain stock options granted to directors and officers vested immediately.
- The quarter ended June 30, 2020, included significant Government assistance recoveries in relation to COVID-19 pandemic relief which were included directly in profit or loss as opposed to deferred (liability).

Use of Proceeds from Financings

The Company completed the following equity financings between February 2020 and April 2021, for aggregate net proceeds of $50,411,757:

- On February 21, 2020 (the "First Financing"), the Company completed a non-brokered private placement for gross proceeds of approximately $11,000,000. The net proceeds of the placement after deducting finders' fees, legal, filing and other fees were $10,381,392;
- On October 29, 2020, the Company completed a short form prospectus financing for gross proceeds of approximately $14,000,000. The net proceeds of the financing after deducting finders' fees, legal, filing and other fees were $13,118,991; and
- On April 1, 2021, the Company completed a Short Form Prospectus financing for gross proceeds of approximately $29,000,000. The net proceeds of the financing after deducting the cash underwriters' commission and expenses, legal, filing and other fees were $26,911,374.

For the period from closing of the First Financing (February 21, 2020) to December 31, 2021, the Company has used the net proceeds of the financings as shown below. These amounts are presented on a gross basis and do not include government grant proceeds.

Principal Purposes	Use of Proceeds $
Research activities	6,124,201
Capital equipment purchases and leasehold improvements on laboratory facilities	2,879,474
Pilot plant expansion	510,584
Intellectual property acquisition	420,998
Business development and strategic alternatives	659,169
Working capital	7,672,741
Proceeds used	**18,267,167**
Remaining	32,144,590
Net proceeds of the financings	**50,411,757**

TRANSACTIONS BETWEEN RELATED PARTIES

Key management personnel are the persons responsible for the planning, directing, and controlling the activities of the Company and includes both executive and non-executive directors, and entities controlled by such persons. The Company considers all directors and officers of the Company to be key management personnel.

The following transactions were carried out with key management (gross before applicable government assistance recoveries):

	Transactions year ended December 31, 2021 $	Transactions year ended December 31, 2020 $	**Balances outstanding December 31, 2021 $**	Balances outstanding December 31, 2020 $
Bedrock Capital	150,000	258,500	-	-
DBM CPA	117,925	91,500	8,400	7,875
Directors' fees	86,250	79,000	-	-
Management and directors' fees	354,175	429,000	8,400	7,875
Officers - Salaries and benefits / research expenses	1,172,800	830,000	631	2,696
Directors and officers - Share-based payments	3,756,185	1,339,100	-	-
Professional fees	188,584	191,635	15,993	38,753
	5,471,744	2,789,735	**25,024**	49,324

(a) Management and directors' fees:

- Includes the services of Bedrock Capital Corp. ("Bedrock Capital") a company controlled by Paul Matysek the Chairman and a Director of the Company;
- Includes the services of Donaldson Brohman Martin, CPA Inc. ("DBM CPA"), a firm in which Dan Martino, CFO is a principal; and
- Includes fees paid to the Company's directors for their positions as non-executive directors and/or board committee members or chairpersons (Lyle Brown, $33,375 (2020 - $39,500), Joseph Guy, $28,375 (2020 - $39,500), Gord Kukec, $22,625 (2020 - $nil), Paul Matysek, $1,875 (2020 - $nil)).

(b) Professional fees:

- Includes the services of Patent Filing Specialists Inc. ("Patent Filing Specialists"), a company controlled by Joseph Guy, a Company Director. Transactions incurred during the year ended December 31, 2021 are included within both intangible assets and professional fees (2020 – professional fees only).

(c) Salaries and benefits (including allocations to research expenses (recoveries):

- Includes salaries and short-term variable cash-based compensation incentives paid to Dan Blondal, CEO ($397,900 (2020 - $362,500)), Stephen Campbell, CTO ($252,000 (2020 - $180,000), John Lando, Former President until November 30, 2021 ($283,150 (2020 - $287,500)), Alex Holmes, COO ($204,750 (2020 - $nil)), and Pamela Kinsman, Corporate Secretary and Director of Sustainability and Corporate Affairs ($35,000 (2020 - $nil)). Expense reimbursements outstanding as at December 31, 2021 related to Alex Holmes (2020 - related to Dan Blondal).

  In accordance with an executive employment agreement the Company has in place with Dan Blondal, in case of termination by the Company without cause, he is entitled to six (6) weeks' base pay (or notice) for every year of service to a maximum of twenty-four (24) months. He would not be entitled to further bonus payments after termination. In the case of resignation after a Change of Control and for 'Good Reason', Dan Blondal is entitled to twenty-four (24) months' base salary.

(d) Share-based payments:

- Includes amounts recognized on vesting of stock options and Equity Incentives granted to directors and officers.
- During the year ended December 31, 2021, 1,580,000 stock options were granted to directors and officers which are exercisable at either $3.62 or $5.10 each. 400,000 of these stock options have a five year term expiring in February 2026, with the remainder having three year terms expiring in either February 2024 or October 2024. The stock options have varying vesting terms. During the year ended December 31, 2020, 1,140,000 stock options were granted to directors and officers exercisable at $2.52 each until July 20, 2023 which vested immediately on grant.
- In October 2021, the Company granted 184,505 RSUs and 8,626 DSUs to various directors and officers (2020 – none were granted).

LIQUIDITY AND CAPITAL RESOURCES

As at December 31, 2021, the Company had working capital of approximately $52,000,000.

The Company considers its capital structure to consist of its components of shareholders' equity. When managing capital, the Company's objective is to ensure that it continues as a going concern, to ensure it has sufficient capital to deploy on new and existing projects (including the requirement for matching funds relating to the SDTC program), as well as generating returns on excess funds while maintaining accessibility to such funds. In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors relies on the expertise of the Company's management to sustain future development of the business. Management reviews and adjusts its capital structure on an ongoing basis.

The Company is not subject to any externally imposed capital requirements. There were no changes to the Company's approach to capital management during the year ended December 31, 2021.

The Company currently has no source of revenues, though it receives funding from government programs, and certain research cost recoveries from strategic partners. Additionally, the Company has historically relied upon equity financing to fund its activities. In order to fund ongoing research activities and pay for operating expenses, the Company will spend its existing working capital and may complete additional equity financings to facilitate the management of its capital requirements.

Additionally, the Company may seek to invest excess capital in guaranteed investment certificates ("GICs") bearing fixed rates of interest that are either redeemable (cash equivalents) or non-redeemable (short-term investments) and have terms not exceeding 24 months. The Company will also hold excess capital in high-interest savings accounts ("HISAs") which bear interest at variable rates (classified as cash equivalents).

As at December 31, 2021, the Company had excess capital invested in HISAs which are accessible on demand and did not have any GIC or other short-term investment holdings. The primary source of interest income earned during the year then ended was from HISAs.

The Company's primary sources of capital and liquidity during the years ended December 31, 2021 and December 31, 2020, were primarily generated from three financings over the course of fourteen months from February 2020 to April 2021, which generated gross proceeds of approximately $54,000,000 (net, $50,412,000) as well as proceeds received from government assistance programs which amounted to $1,948,000 and $3,699,000 during those respective years. The financings over the previous two fiscal years are summarized as follows:

- In February 2020, the Company completed a non-brokered private placement for gross proceeds of approximately $11,000,000;
- In October 2020, the Company completed a Short Form Prospectus financing for gross proceeds of approximately $14,000,000; and
- In April 2021, the Company completed a Short Form Prospectus financing for gross proceeds of approximately $28,900,000.

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors relies on the expertise of the Company's management to sustain future development of the business.

The Company is not subject to any externally imposed capital requirements and there were no changes to the Company's approach to capital management during the year ended December 31, 2021. The Company does not have specific capital or operating expenditure commitments on any of its projects aside from the provisions of SDTC Program #2 that require the Company to have matching funds to the grant amounts and to incur the required expenditures to complete the various Milestones. The Company will use its existing working capital to incur the required SDTC Program #2 expenditures.

Contractual obligations

The following table summarizes the Company's contractual maturities for its financial liabilities:

As at December 31, 2021	Carrying amount $	Contractual cash flows $	Under 1 year $	1-3 years $	3-5 years $	More than 5 years $
Accounts payable and accrued liabilities	759,014	759,014	759,014	-	-	-
Accounts payable to related parties	25,024	25,024	25,024	-	-	-
Lease liabilities	799,930	990,588	207,724	355,342	233,194	194,328
Total	**1,583,968**	**1,774,626**	**991,762**	**355,342**	**233,194**	**194,328**

OUTSTANDING SHARE AND EQUITY DATA

The authorized share capital of the Company consists of unlimited common shares without par value. All issued common shares are fully paid. As at the MD&A Date, the Company's common share data was as follows:

	As at the MD&A Date #	Weighted average exercise price $
Common shares issued and outstanding	95,579,373	n/a
Stock options outstanding	6,487,357	2.77
Warrants outstanding	4,342,917	2.60
RSUs/DSUs outstanding	382,554	n/a
Fully diluted	**106,792,201**	

During the year ended December 31, 2021, the Company granted 184,505 RSUs and 8,626 DSUs to officers and directors of the Company, whereby one-third (64,377) of the RSUs and DSUs vest on August 27, 2022, one-third (64,377) vest on August 27, 2023, and the remaining one-third (64,377) vest on August 27, 2024.

The value of the Equity Incentives granted was based on the fair value of the of the Company's common shares on the date of grant. Accordingly, the Equity Incentives were granted at a fair value of $4.17 each for a total value of $805,356 which is being recognized within share-based payment expense as the Equity Incentives vest.

SUBSEQUENT EVENTS

The Company has received proceeds of $59,532 upon the exercise of stock options and warrants as described below:

- The Company issued 25,000 common shares upon the exercise of stock options at $0.70 each for proceeds of $17,500; and
- The Company issued 26,270 common shares upon the exercise of warrants at $1.60 each for proceeds of $42,032.

ACCOUNTING MATTERS

The preparation of financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of income and expenses during each reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates. The Company's significant accounting policies are detailed in Note 2 to the financial statements for the year ended December 31, 2021.

Key sources of estimation uncertainty

The preparation of financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as at the date of the financial statements and reported amounts of income (loss) and expenses during each reporting period. Estimates and assumptions are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual outcomes can differ from these estimates.

Fair value of stock options and compensatory warrants

Determining the fair value of compensatory warrants (finders' warrants) and stock options requires estimates related to the choice of a pricing model, the estimation of stock price volatility, the fair value of the Company's common shares, the expected forfeiture rate and the expected term of the underlying instruments. Any changes in the estimates or inputs utilized to determine fair value could have a significant impact on the Company's future operating results or on other components of shareholders' equity.

The fair value of stock options granted, or compensatory warrants issued by the Company is determined by using the Black-Scholes option pricing model. The fair value is particularly impacted by the Company's stock price volatility which is determined by way of a historical look-back of weekly closing stock prices over a period of time equivalent to the term provided on stock options and compensatory warrants when granted or issued.

Property and equipment

The estimated useful lives of property and equipment are reviewed by management and adjusted if necessary. To estimate property and equipment's useful life, management may use its past experience, review engineering estimates and industry practices for similar items of property and equipment and/or apply statistical methods to assist in its determination of useful life.

The estimated useful life of the Company's pilot plant within property and equipment is subject to specific estimation uncertainty as to the duration of use. The use of the pilot plant has historically been driven by securing government assistance to conduct research activities that utilize the pilot plant. Accordingly, the Company has historically depreciated the pilot plant over the term of the government assistance program. Future determinations of the expected life of the pilot plant may differ from historical experience.

There have been no changes to the depreciation methods used by the Company during the year ended December 31, 2021. The Company's pilot plant is being depreciated over the term of the existing SDTC Program #2 which is expected to conclude in June 2024.

Critical judgments in applying accounting policies

Income taxes

Tax provisions are based on enacted or substantively enacted laws. Changes in those laws could affect amounts recognized in profit or loss both in the period of change, which would include any impact on cumulative provisions, and in future periods. Deferred tax assets (if any) are recognized only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse and a judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognized in respect of deferred tax assets as well as the amounts recognized in profit or loss in the period in which the change occurs.

The Company has determined that the likelihood and timing of future profitability for which to use its unrecognized deferred tax assets is uncertain at this time, therefore, the Company's deferred tax assets continue to be unrecognized.

Research expenses

The determination of whether expenditures on research and development activities meet the criteria for capitalization as internally generated intangible assets is subject to estimation and uncertainty.

The Company has determined that its activities continue to be classified as research in nature, as opposed to development. This results in research costs being expensed to profit or loss within the financial statements.

Changes in accounting policies and future accounting standards

During the year ended December 31, 2021, there were no changes to the Company's significant accounting policies, nor any new accounting policies adopted.

Certain pronouncements have been issued by the IASB or IFRIC that are effective for accounting periods beginning on or after January 1, 2022. The Company has reviewed these updates and determined that none are applicable or consequential to the Company.

Financial instruments – classification and fair value

Classification of financial instruments

Financial assets:	**Classification:**
Cash and cash equivalents	FVTPL
Receivables	Amortized cost
Deposits	Amortized cost

Financial liabilities:	**Classification:**
Accounts payable and accrued liabilities	Amortized cost
Accounts payable to related parties	Amortized cost
Lease liabilities	Amortized cost

The Company's financial instruments can be exposed to certain financial risks including liquidity risk, credit risk, interest rate risk, price risk, and currency risk. Details of these risks and related assessments as well as the fair value measurements of the Company's financial instruments are included in the Company's financial statements for the year ended December 31, 2021, within Note 11.

OFF-BALANCE SHEET ARRANGEMENTS

Nano One does not utilize off-balance sheet arrangements.

PROPOSED TRANSACTIONS

There are no proposed transactions as the MD&A Date.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Information provided in this MD&A and the financial statements is the responsibility of management. In the preparation of the financial statements, estimates are sometimes necessary to make a determination of the carrying value for certain assets or liabilities. Management believes such estimates have been based on careful judgments and have been properly reflected in the financial statements. Management maintains a system of internal controls to provide reasonable assurances that the Company's assets are safeguarded and to facilitate the preparation of relevant and timely information.

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A.